1 3

ome Temp. ....

ocus ....

ome Temp. ....

Transparency Conditions ....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
						David Dunlap Observatory	
						74" Logbook 39	
						Plate Nos. 31084 - 31806	
						Apr. 1968 - Feb. 1969	

Date 12-13 April Fri-Sat 1968 **Observer** Go Hb, Pt. **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
579-1 to 25							13½°C	20^h15^m (4:55)	01^h10^m	

Dome Temp. 53°F

Focus 15.375

Dome Temp.

Transparency Conditions Good (haze)

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
						sky thickening and closing in	

7

Visitors: 166

Date April 13, 1968 Sat **Observer** Ga., Hh., Ch. **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H

Dome Temp. ....

Transparency Conditions ....

Focus ....

Dome Temp. ....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality

9

Date Mon Apr 15-16/68 **Observer** Hd Sc-Go - Ri mce **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
580-1 to 41	M?, Nova Del, Nova Vul							20h 10m	04h 30m		
31084	Nova Vulp.	19:43.8	+26° 56'	I-25	103a-O	.008	5.6°C	4:4 2 (13)	4:54	2	E1:31
"	"	"	"	"	"	"	"	4:54:15	4:59:30	2	E1:26
31084 F1	focus test						5.6°C				

Dome Temp. 35°F

Focus 15.24

Dome Temp. 29°F

Transparency Conditions EXCL.

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.		REMARKS	Quality
4h30m										
									900U	
1:54	2	E1:31	+26° 06'	10"→3"	5-6	NOVA	3-3.3	set 2	20/30	SL. WEAK
1:59:30	2	E1:26	"				3-3-3	set 5	20/15	WEAK
							20/16		1 P.H. in N.P.	FINE

Date Tues/Wed Apr. 16/17 - '68 **Observer** Hk-Ft / Hr-Ch **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
31085	3 Gem	06h 03.7m	+23° 08′	I-25	103aO	.008	10°C	20:15 (14)	20:31	3	03:48W
31086	ψ¹ Aur	06h 17.2m	+49° 20′	"	"	"	10.5°C	20:40 (93)	22:13	4	05:16W
31087	HD 115043	13h 09.5m	+57° 14′	"	"	"	10.5°C	22:33 (36)	23:03	1	00:12E
31088	HD 89449	10h 14.3m	+19° 59′	"	"	"	"	23:18 (72)	23:30	2	02:39W
31089	HD 89904	10h 17.3m	+34° 21′	"	"	"	"	23:41 (116)	23:51	"	02:53W
31090	HD 90569	10h 22.4m	+10° 16′	"	"	"	"	23:59 (59)	00:58		02:56W
310 ~~89~~ 91	HD 132737	14h 55.6m	+27° 33′	"	"	.016	10.4°C	01:11 (118)	03:37	3	[illegible]
310 ~~90~~ 92	" 140913	15 41.1	+28 47	"	"	.016	10.3°C	03 18 (94)	04 52	4	02 34W
92F	Focus Test OTB			"	"	"					

Dome Temp.

Focus 15.

Dome Temp.

Dome Temp. 42°F

Focus 15.31

Dome Temp.

Transparency Conditions REASONABLE

OCCASIONAL CLOUDS AFTER MIDNIGHT.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS			Quality
03:48W	+23°07'	5"	6.0	B2.5Ib	3-3-3	MK Std	set 5 (PLATES MARKED IN UPPER CORNER 2ND ITEM BACK OF BOX)	10/6	*1 WEAK
05:15W	+48° 18'	5"	5.0mv	M0Iab	3-3-3	"	" 5	10/60	SL. STRONG
00:12E	+56°53'	"	7.3	G1 V	3-3-3	"	" 5 (SLIGHTLY FAINTER STAR NEARBY - SEE FINDER FIELD)	10/20	SL. WEAK
02:37W	+19°37'	4"	4.8mv	F6 IV	3-3-3	F BS *2	set 2	10/20	FINE (GUIDING ...)
02:53W	+34°05'	"	5.7mv	A3	3-3-3	" *2	" 5	10/12	FINE
03:56W	+09 57	"	6.0mv	Ap	3-3-3	" *2	" 9	10/12	FINE
0135W	+27°18'	"	9.03	K0 III	2-1-2	SSV	set 5	80/160	FINE
02 34W	+28 35		8.81	G0 V	2-1-2	"	"	30/110	FINE
					10-8		" 9		ok

#1 P.H. Loaded in N.P.

*1 P.H. NOT FULLY IN SPECTROGRAPH.

*2 ONLY 1 PLATE/STAR FOR THIS PROG.

Date Thurs - Fri / Apr 18-19/68 **Observer** - Hr **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp. 12.7	Starting Time E.S.T.	Ending Time E.S.T.	P.H
31093	HD 149803	16 32.0	+29 56	I-25	103aO	.016	12.0	0144 [18]	[2] 0446	1
31093 F1	focus ~~test~~									

Dome Temp.
Focus 15.3
Dome Temp.
Hour Angle End

Dome Temp. +42° F

Focus 15.35

Dome Temp.

Transparency Conditions Clearing After Midnight

...ding Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
[illegible]	1	01 44 W	+29 49	8"	8.90	F7 V	2-3	Set 5. SS Vr. SKY BECOMING POORER : 100/73	WEAK
									OK

Date Apr 19 - 20 Fri - Sat Observer Ri-Pl / Hk. 2d (60) Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
31094 }	HD 78362	9 ~~10.9~~ 02.7	63 ~~31~~ 55	I-25	103 AO	.008	14°C	20h 00 (7)	20h 07	1	[illegible]
31095 }	HD 78712	9 ~~08.6~~ 04.6	31 ~~08~~ 23	I-25	103 AO			20:15 (130)	22:25	1	[illegible]
31096	HD 96528	11 ~~04.9~~ 02.3	23 ~~31~~ 52	I-25	103 AO			22:34 (38)	23:12	2	[illegible]
31097	HD 97302	11 ~~10.8~~ 06.9	55 ~~[illegible]~~ [illegible]	I-25	103 AO			23:18 (31)	23:49	3	0 15W
581-1 to 22	Nova Del, Vul							00h 00m	04h 15m		
31098	Nova Vul	19:43.8	+26° 56'	[illegible]	[illegible]	[illegible]	13.5°C	04h 20m (32)	04h 52m	1	?

Dome Temp.
Focus 15
Dome Temp.

Dome Temp. 47°F

Focus 15 : 38.5

Dome Temp. 37°F

Transparency Conditions Good

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	(counts) (gain)	Quality
0h 40m W	63° 38′		4.65	Am	3-3-3	FBS set 2	24/20	Sl. weak
2h 57m W	31°06′	4-5	5.3	Mb.5e	3-3-3	set 5	60/20	Sl. weak
1h 44m W	21° 31	3	6.3	Am	3-3-3	set 2	24/20	Sl. weak
2h 15 W	+55° 05′	3	6.56	A2	3-3-3	set 5	24/20	Sl. weak
	+27° 07′							
?	+27° 07	8				FAIRLY LIGHT AT END OF EXPOSURE set 2 (nova)	20/40	NO COMP NOVA OK
					9	set 4 (comp)		
						Focus test (9-9) set 9 (focus test)		FOCUS OK

WHERE IS THE ROPE?

SLAB OF LIGHT ENTERING NORTH PIER ROOM THROUGH WOODWORK NEAR HINGE OF DOOR

17 Visitors 160 (Ai, DL, NY)

Date April 20-21 **Observer** L NY **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H

Dome Temp.
Focus
Dome Temp.
Hour Angle End

Dome Temp. ....

Focus ....

Dome Temp. ....

Transparency Conditions ....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
						Clouded in 11 PM	
						Some rain at 01:30 a.m	

Dome Temp. 3[illegible]
Focus 15 31
Dome Temp.

Date Wed/Thurs 24/25 April 1968 **Observer** Hb, ~~[illegible]~~/ **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P[illegible]	Hour Angle End
31099	21 Leo Minor	10h 01m.5	+35°44′	I 25	103aD	.008	10°C	20 07	2016	2	00 56 W
31100	β Vir	11 45.5	+02 20	"	"	"	"	20 48	2055	3	01 01 E
31101	HD 86355	09 52.7	+28 14	"	"	"	"	21 03	2306	4	03 05 W
31101F	focus test										07 3[illegible]

Dome Temp. 38°F
Focus 15.31
Dome Temp.

Transparency Conditions fair (cloud on horizon)
2020 — photometric?
2025 — cloudy! 2330 — nearly overcast
— false start in photometry.

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp. 3-3-3	REMARKS	Quality
..16	00 06 W	+35° 26′	~2″	4.7	A7V	3-3-3	set 2 MK Std. 1× normal 20/25	FINE
[illegible]	01 01 E	+01° 57′	3″+	4.2	F8V	3-6	set 2 MK Std ½ × n 20/20	WEAK
..06	03 05 W	+27 57	v. poor ~3″+	~7	F0	3-3-3	set 2 Fitzgerald Bright * cloudy 20/~~40~~ 28	SL. WEAK
	07B / 17A					10/8	set 5	FINE

VISITORS (Go, Ch, NY)
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Date April 27-28 Sat-Sun. 1968 **Observer** Hb NY/Pl-Hk **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
31102	HD 97244	11h 06.5	14 56	I25	103a0	.008	7½°C	23 06	(11) 23 17	1
31103	HD 95310	10h 55.2	+39° 45	"	"	"	"	23 24	(18) 23 42	1
31104	HD 95608 ?	10 57.0	+20 43	"	"	"	"	23 47	(9) 23 56	1
311~~03~~ 05	HD 136202	15 14.2	+02 09	I25	103a0	.008	7°C	0 05	(20) 0h 25	2
311~~04~~ 06	HD 145001	16h 03.0	+17° 19′	"	"	"	7½°C	0h 40	(24) 1 04	3
311~~05~~ 07	HD 176318	18h 54.6	+38° 07′	"	"	"	"	1 12	(17) 1 29	4
311~~06~~ 08	HD 161701	17h 41.9	−14° 42′	"	"	"	"	1 39	(49) 2:28	1
311~~07~~ 09	α Sge	19h 35.6	+17° 47′	"	"	"	"	2:47	(13) 3:00	2
311~~08~~ 10	NOVA VUL	19h 43.8	+26° 56′	"	"	"	"	3:08	(42) 3:50	3
311~~09~~ 11	NOVA DEL	20h 37.7	+18° ~~55~~ 48	"	"	"		4:03	(10) 4:13	4
311~~10~~ 12	HD 176318	18h 54.6	+38° 07′	"	"	"		4:27	(13) 4:40	1
11, 12 (F)	FOCUS TEST									2

Dome Temp. 33° F

Focus 15.26

Dome Temp.

Transparency Conditions good

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
—	14° 34'	poor 3-4"	6.24	A5	3-→	Set 2 Fitzgerald Bright * 20/2~~5~~3	VERY WEAK
2h 52' W	39° 23	"	5.55	A2	3-3-3	set 5 (see program – plate taken already) 20/25	FINE
3h 03 W	20° 21'	"	4.0	A..	3-3-3	set 9 Fitzgerald 20/25	FINE
0h 44m E	+01° 54'	"	5.6	G0	3-3-3	set 2 Std. Vel. 20/40	FINE
0h 54m E	+17° 08'	"	6.1	G4	3-3-3	set 5 " " 20/40	FINE
3h 20 E	38° 13'	"	5.6(B)	B6V	3-3-2	set 5 Spectroscopic binaries 20/24	FINE
1h 20m E	-14° 44'	8"	6(B)	B9 [	3-3-3	set 5 " " 20/24	FINE
2h 30m E	17° 57'	5"	4.3	G0 II	3-3-3	set 5 MK Std 20/40	FINE
1h 47m E	27° 07'	"	–	NOVA	3-3-3	set 5 SEE FINDER FIND 20/40	FINE
2h 18m E	19° 02'	"	–	NOVA	3-3-2	set 5 DARK SLIDE WHEN DOME LIGHTS ON 20/40	FINE
	+38° 13'	"	5.6B	B6V	3-3-3	set 5 Spectroscopic binary End sky light 20/24	FINE
						set 9	FINE

TELESCOPE HIT PLATFORM -
NO ADVERSE EFFECT.

P.H. #2 IN N.P.

Date Sun Mon April 28.29 **Observer** Ri — Bh H—r **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I	Hour Angle End
3111H 13	HO ~~86355~~ 86358	9h 52.7	28°14	I 25	103a0	.008	16.5	20.12	41 20.53	2	[illegible]
311 ~~H~~ 14	HO 97744	11 06.5	14°56					21:09	22 21:31		[illegible]
311-3 15	HO 114762	13 07.5	+18°02					21:40	79 22:59	3	[illegible]
3114 16	HO 123782	14 04.6	+49°56					23:07	58 00:00		[illegible]
311-5 17	" 122693	13 58.3	+25 03	"	"	.016		00.26½ (27)	182 0330	4	[illegible]
311-6 18	Nova Vul.	19 43.8	26 56	"	"	008		03 40½	8 03 49	1	[illegible]
"	"	"	"	"	"	"		0350	20 0410		[illegible]
31119	Nova Del	20 37.7	18 55	"	"	"		0417	6 0423	2	[illegible]
31119F1	Focus Test		OTB								

Dome Temp.
Focus
Dome Temp.

Dome Temp. 40° F

Focus 15.32.5

Dome Temp. 34° F

Transparency Conditions good

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1h09W	+27° 56	3	6.37	F0	3/3/3	Fitzgerald Bright sd 2 20/40	SL. WEAK
0h32W	+14° 35'	3	6.24	A5	3-3-3	" sd 5 20/24	SL. WEAK
0h00	+17° 42		8.2	F7	3.3.3	Std Vel sd 2 40/80	SL. WEAK
0h05W	+49° 38'	3	6.8	M2	3-3-3	" sd 5 20/60	FINE
03 41W	+24° 44	3-4	8.74	F8 V	2-1-1	SS V. sd 2 100/~~200~~ 191	FINE
0146E	+27 06		5.6		3-6	field same as #31108 " 5 20/20	FINE
0125E	"				3-3-3	" 2 20/40	
0205E	+19 02		5.0		9	" 2 20/40	FINE
					10/8	" 9	FOCUS OK CENTRE VERY OK

PH ~~#~~ 3 loaded [illegible] in [illegible]

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Date Wed May 1-2 1968 Observer L-Bg Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
31120	H.D. 103095	11 47.2	38 26	I·25	103A o	Set .008	+59	21 54	23 05	3

Dome Temp.

Focus 15

Dome Temp.

Hour Angle End
[illegible] W

Dome Temp. 31.0° F
Focus 15 24
Dome Temp. ....

Transparency Conditions Clouds early evening then clearing.

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
[illegible]	3	1 37W	37 58	0-1	7.3	G5	3-3-3	Std Vel. (Dev 3-19/68°F/5.0 min) 40/35	WEAK
								Clouded in solid at 23 05	
								3 PHs loaded in N Pier.	
								- cloudy to 1:00 - no chance to get more - [illegible]	

Date Thurs/Fri. May 2-3/68 **Observer** — Hs — Ft **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp. +7.2°C	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
31121	HD 140913	1541.1	+28 47	I-25	103a O	.016		00h 27m	(31) 00 58	)	?

Dome Temp.
Focus 15
Dome Temp.

Dome Temp. +32°F

Focus 15.26

Dome Temp.

Transparency Conditions Clearing after 23h EST.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
?			8.81	G0V	1-4	SE 5 S.S.V. FOG!! 100/12	EXTREM. WEAK

29 Visitors, Bn, Ch, Bb I: 80 II: 65 / 145 total – talk only

Date Sat./Sun May 4-5/68 **Observer** Sc / Gs **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
31122	HD 146001	16:08.8	-25°13		103a-O	.016	+7°C	1:50 50	2:40	1/4	
~~31123~~	~~Nova Vul.~~	~~19:43.8~~	~~+26°56~~		"	.008	"	3:00 "	4:11		
31123	HD 187614	19:45.8	26° - 50'					3:00	4:11		E1:02

Dome Temp.
Focus
Dome Temp.

Dome Temp. 30° F
Focus 15 26
Dome Temp.

Transparency Conditions clouds cleared off but still hazy

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
?	-25°23'	5	6.7	B9	3/3/2	20/24	FINE
1:02 E	+27°02	5	5.6		3/6	20/18	WEAK ⊕ - P.H NOT FULLY PUSHED INTO CAMERA
E1:02			7.30	G5		plateholders #'s 1, 3, & 4 loaded [illegible]	

[something may be wrong with exp. meter. seems to count very slowly on [illegible]]

- EXP. MTR OK : WRONG STAR

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Date May 5/6 1968 Sun/Mon **Observer** Ri Gv / Hv Bh Go **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
582-1 to 30							+3.8°	20h15m	02h15m		
31124	Nova Vul	19 43.8	+26 56	I.25	103a.0	.008	3.7°	0254	19 0313	3	[illegible]
"	"	"	"	"	"	"		0317	38 0355	"	[illegible]
31125	Nova Del	20 32.7	+18 55	"	"	"		0401	0409	4	[illegible]
	Focus [illegible]		OTB								

Dome Temp.
Focus 15
Dome Temp.

Dome Temp. 30°F

Focus 15.22

Dome Temp.

Transparency Conditions Good → Fair

~~Seei~~ Seeing & Focus Very Poor

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS		Quality
								Clouds.		
3:13	3	0154E	2707	5	5.6	—	3-3-3	Set 2	20/20	SL. WEAK
3:55		1h 11m E	"	"	"		3-3-3	" 5	20/40	FINE
		0152E	+1903	"	5.0	—	3-3-3	" 2	10/20	
							10/8	" 9		

Date May 6/7 1968 Mon/Tue Observer Sc Mcc Gee Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
583-1 to 34								20^h25^m (7:00)	03^h25^m		
31126	NOVA VUL.	19: 43.8	26° 56'	I-25	103 a O	.008	5.8° C	03:38 (28)	04:06	#1	E0:56
31127	NOVA DEL	20: 37.7	18° 48'	I-25	103 a O	.008		04:09 (10) (5:38)	04:19	#2	E1:38

Dome Temp.

Focus

Dome Temp.

Dome Temp. 35

Focus 15.25

Dome Temp.

Transparency Conditions EXCELLENT

IMPRESSIVE AURORAL DISPLAY
~ 01:00 - 03:00

Ending Time E.S.T.	P.H	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	GAIN / COUNTS	Quality
[illegible]	#1	E0:56	27° 07'	4"	?	NOVA	3-3-3	set 3	20/26	SL. WEAK
[illegible]	#2	E1:38	19° 03'	6"	?	NOVA	3-3-3	THIS IS LIKELY CONTAMINATED BY THE SOLAR SP. set 3	20/40	FINE

Date THURS./FRI - MAY 9/10/68 **Observer** Hr Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp. 13.5	Starting Time E.S.T.	Ending Time E.S.T.	P.F.
31128	HD 131861	14h 50.9	+45° 43′	I-26	103.0	.008	13.5	00:07 (208)	0335	1
31129	NOVA L VUL	19h 43.8	+26°56	"	"	"	"	03:43 (32)	04:15	2
31129F	focus test						13.5			

Dome Temp.
Focus 15
Dome Temp.
Hour Angle End

Dome Temp. +42°F

Focus 15.37

Dome Temp.

Transparency Conditions FAIR – Some Clouds – Haze

Seeing <u>Very Poor</u>

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0338W	4528	10	7.64	F3	3-3-3	Set 5 100/151	V. SL. WEAK
0h35E	27°06'				3-6	set 5 20/15	VERY WEAK
					10/8	set 9 focus 15.37.	FINE

Nova Vul. Seems Much Fainter

Exposures Should be Started

MUCH EARLIER

1 P.H. in N.P.

Date Fri. May 10-11/68 **Observer** L. Bd / Hb **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
31130	H.D. 99707	11 03.3	67 45	I-25	E103a0	set .008	11.7	20 26	15 20 41	3	0 43W
31131	" 99713?	11 05.8	68 49	"	"	"	11.7	21 00	20 21 20	4	1 08W
31132	" 99513	11 03.8	36 51	"	"	"	11.7	21 27	106 23 13	1	3 04W
31133	ι Ser	15 37.1	+20 00	I 25	103a0	.008		23 57	10 00 07	2	00 11E
"	"	"	"	"	"	"		00 09	17 00 26	"	00 14E
"	"	"	"	"	"	"		00 26½	4½ 00 31	"	00 22E
31134	HD 136202	15 14.2	+02 09	I 25	103a0	.008	11.7°C	00 39	39 01 18	3	0 30W
31135	Nova Vul	19 43.8	+26 56	I 25	103a0	.008		01 31	147 03 58	4	00 4?E

Dome Temp.

Focus

Dome Temp.

Dome Temp. 44°F

Focus 15.35

Dome Temp. 33°F

Transparency Conditions Good

Poor after midnight

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0 43W	67 22	1	6.04	A5	3-3-3	Set 2 Fitz. Bright Star 20/24	FINE
1 08W	68 27	1	6.23	A2	3-3-3	" " " " 20/24	FINE
3 04W	36 29	1	5.74	gM3.5	3-3-3	" " " " haze 20/60	FINE
00 33E	+19 45′	~2	4.6	A1V	3-3-3	Set 2 { MK Std. 1×N thick Ci 20/24	FINE
00 14E	"	"	"	"	—	" 5 { " 2×N 20/48	STRONG
00 09E	"	"	"	"	—	" 9 { " ½×N 20/12	WEAK
01 00W	+01 54	2″	5.6	G0	3-3-3	Set 2 Std. Vel. 20/40	FINE
00 49E	+27° 06′	~2″	~6?	—	3-3-3	Set 2 field drawn — Clouds 20/40 (33)	SL. WEAK

Ph. #1, 2, 3 loaded in north pier.

Saturday May 11: 144 Visitors: Showed slides and gave talk. Ai, Pl, Hh.

Date Mon/Tues May 13/14 **Observer** Sc/Gs / Msc-Bg **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
31136	HD 115612	13 13.2	+68 56	I-25	103a0	008	15.3	20:36 [24]	21:00	3	1:5?
31137	HD 107328	12 15.3	+03 53	"	"	"	"	21:24 [55]	22:19	1	1:0?
31138	HD 114762	13 07.5	+18 02	"	"	"	"	22:43 [166]	01:29	4	W3:50
31139	NOVA VUL	19:43.8	+27° 56'	I-25	103a0	.016		1:39 [41]	2:20	2	E2:15
"	"	"	"					2:20 [19]	2:39	2	E1:16
31140	HD 180553	19:11.9	27° 17'	I-25	103a0	.008		2:45 [27]	3:12	3	E0:52
31141	HD 186547	19:40.0	+13° 03'	I-25	103a0	.008		3:16 [25]	3:41	3	E0:50
31142	NOVA DEL	20:37.7	+18° 48'	I-25	"	"		3:45 [11]	3:56	1	E1:33
"	"	"	"	"	"	"		3:56 [5]	4:01	1	E1:28

Focus Cut ———— G108 ———— 50°F

~~Changed~~

Dome Temp. 48°F
Focus 15.41
Dome Temp.

Transparency Conditions GOOD (occasional small cloud)

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1:05 E	+68:35	4"	6.09	B9	3-3-3	(d & e) 20/24	(and 10 mins) FINE
1:10 W	+3:31	"	6.1	K1	4-2-3	20/40	FINE
W3:30	+17:43	4	5.2	F7	3-3-3	"spotter" Acting odd - will not work 20/194	SL. WEAK
E 2:15	+27:07		~6	NOVA	3-2	set 5 automatically #31112 - base [illegible] 20/47	SL. WEAK
E1:56	"				2-2	set 8 setting much worse 20/20	WEAK
E 0:52	+27:25	3-4"	6.2	B9	3-3-3	B8 - B9 Bin set 2 20/24	(Gd. [illegible]) FINE
E0:50	+13:14		6.07	B8	3-3-3	B8 - B9 Bin set 5 20/24	FINE
E1:33	+19:03	4"		NOVA	3-3-3	set 2 20/40	FINE
E 1:28	"				9	set 5 20/20	WEAK

PH A 13 — Focus 64 70 — numbers increasing 30/30 with 540 filter.

41 May 15/68 · Changed to I-12. Focus 12.75 Tilt 20.3 / I-25 was tilt 23.23 /

Date.................................... **Observer**.................................... **Julian Day**....................................

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
31142 F_1	Focus test				Lantern	008	13°C		OTB	3
31142 F_2	"				"	"	"			3
	May 16/68		Focus of new grating.				T = 47°F			
31142 F_3	focus test					13				A
" F_4	"					13				B
	17 May/68		(L - Hb, - Sk - [illegible])			T = 50°F				
31142 F5	focus test		in [illegible] / outfocus							
F6										
F7										
F8										
F9										
F10										

Dome Temp. ....

Focus ....

Dome Temp. ....

Transparency Conditions ....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
					no filter		
Focus 12.75					20/16		
12.65 (a), 70 (b), 75 (c), 80 (d),		skip line ^ 85 (e)			″	focus at 12.65	
focus 63				G12 filter			
focus 71				″			
				G12	7/7		
					7/7	focus set from 71 to 76	c to VI
					7/7	″ ″ ″ 76 to 66	c to V5
					7/7	″ ″ ″ 66 to 45	
plate carrier	turned	1 flat		C.W. on screws	7/7	focus 45	
″	″	″	1 ft	C.W on screws	7/7	focus 50	
″	″	″	″	″ ″ ″	7/7	″ 45	

43

Date May 17, 1968 **Observer** **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
3142 ~~[illegible]~~	focus test	in m /	out out	6-108	II a O					A
F 12 repeat F 13	"	"	.	"	"		45°F [illegible]	carrier	2 [illegible]	
	21 May 1968									
	focus test					19	48°F			A
	"									B
	"									C

Dome Temp.
Focus
Dome Temp.
Hour Angle End

Dome Temp. ....

Focus ....

Dome Temp. ....

Transparency Conditions ....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
					7/7	-	
C W	Focus 45				7/7		
			G12 filter		7/7	focus 42	
			"		"	" 46	
			"		"	" 50	

45 Visitors: 1st - 67 } shown Jupiter Bn, Ch, Bb
2nd - 97

Date MAY 18/19, 1968 **Observer** Ch / Gs **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
31143	γ Her	16 17.5	+19:23	I 12.5	10390	008	11.2°C	23:37	[2] 23:39	4
31144	HD 146001	16 08.8	-25° 13	"	"	"	"	00:15	[26] 00:41	1
31145	HD 174567	18:46.0	+31:31	"	"	"	"	01:01	[10] [illegible]	3
31146	HD 173117	18 38.6	-25° 05'	"	"	"	"	01:30	[28] 01:58	2
31147	HD 171961	18 32.4	-23 36	"	"	"	"	02:10	[25] 02:35	1
31148	NOVA VUL.	19 43.8	+26 56	"	"	"	"	03:01	[44] 03:45	3
31148F	FOCUS [illegible]	ITB/OTB								

Dome Temp. 40°F
Focus 12:65
Dome Temp.

Transparency Conditions Good

Clouds in south prohibited work on − dec. stars.

NB → 6" Finder: focus of stars is impossible; if pull out eyepiece to focus, can not see X hairs! RLC

...nding Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS		Quality
[illegible]	4	1:11 E	+19 :14	3	4.0	A9III	1-2-1	MK Standards Set 2 (1×)	30/8	sl strong
[illegible]	1	0:00	−25 22	3	6.7	B9	1-2-1	Set 5 B8-B9 *	40/16	SL. WEAK
[illegible]	3	2:07 E	+31 :37	3	6.5	B9	1-2-1	Set 5 B8-B9 **	40/16	FINE
[illegible]	2	01 13 E	−25 01	4	6.4	B8	1-2-1	Set 5 B8-B9 Prog	40/16	FINE
[illegible]	1	00 30 E	−23 :30	"	5.73	B9	1-2-1	Set 5	40/16	FINE
[illegible]	[illegible]	00 31 E	+27 :07	2"-3"	?	?	1-2-1	Set 5 Nova Vul.	40/29	FINE
							3-4			NO OUTSIDE COMPARISON

* The plate is marked 3"45 but it is actually 3"44
** Plate marked 145

Monday

Date 20-21 May 1968 **Observer** Sc - Gs / Ri - McC **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
21149	HD 115043	13 09.5	+57 14	I-12½	103a-O	.008	11°C	21.55 (10)	22.05	1(r)
"	"	"	"	"	"	"	"	22:10 (55)	23:05	1(8)
21150	HD 131861	14 50.9	+45°43'	"	"	"	39°F	23:12 (52)	00:04	2

Dome Temp.
Focus 12.6
Dome Temp.
Hour Angle End

Dome Temp. 42°F

Focus 12.65

Dome Temp.

Transparency Conditions Clouds around horizon

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0:32W	+56°53′	3″	7.3	G1 V	1-2-1	(finder badly out of frame - focused (trimmed) [illegible]/7	WEAK
—	"	"	"	"	1-2-1	MK st. list not in box -)(2x) field drawn 20/28	STRONG (GUIDING)
0h48W	+45°25′		7.64	F3	1-2-1	20/125	FINE
						clouds.	
						PH #3 loaded in a. piece	

Date Tues Wed May 21/22/68 **Observer** Ri (Hr) **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
31151	HD 96436	11 01.8	+02 30	I 12½	103aO	.008	13.5°C	20:30	(15) 20:45	3
31152	HD 107328	12 15.3	+03 53	"	"	"		20:54	(14) 21:08	4
31153	HD 123782	14 04.6	+49° 56					21:19	(20) 21:39	
31154	HD 114762	13 07.5	+18 02					21:48	(34) 22:22	
31155	HD 131861	14 50.9	+45° 43′					22:30	(76) 23:46	1
31156	HD 139892	15 35.6	+36° 58					23:51	(4) 23:55	2

Dome Temp. 46°F

Focus 12.65

Dome Temp.

Transparency Conditions cirrus + haze

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
[illegible]45	3	1ʰ 22 W	+02° 08′	3	5.55	sg G7	1-2-1	Fitz Bright Star set 5 20/14	SL. WEAK
[illegible]	[illegible]	0ʰ 32 W	+03° 32′		6.1	K	1-2-1	Std Vel. set 2 20/14	FINE
[illegible]		0ʰ 45 E	+49° 38′	3	6.8	M 2	1-2-1	" " set 5 20/20	FINE
[illegible]		0ʰ 53 W	+17° 42′		8.2	F 7	1-2-1	" " field drawn set 9 40/28	(GUIDING) SL. WEAK
[illegible]	1	0ʰ 35 W	+45° 26′	3-4	7.64	F 3	1-2-1	Spect. Binary (KAFS) set 5 40/28	(GUIDING) SL. WEAK
[illegible]55	2	0ʰ 00	+36° 44′		5.1	B3n	1-2-1	" " " set 5 20/8	FINE

Clouded in 00:00

2 P.H. loaded in H.P.

Date 22-23 May 1968 / Wed-Thurs **Observer** Musc - F / F - Ric **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I	Hour Angle End
31157	HD 94480	10:49.3	+26° 01'	I-12½	103a0	.008	+13.3°c	20 : 31	20:45	3	W1:39
31158	HD 944 97	10:49.4	34° 34'	I-12½	103a0	.008	"	20: 48	21 : 01	3	W1:54
31159	HD 94602 br	10:50.2	25° 17'	I-12½	103a0	.008		21: 04	21 : 06	3	W1:57
~~31160~~	~~HD 94602 ft~~	~~10.50.2~~	~~25° 17'~~					21 : 07	21 : 24	4	W[illegible]
31161	HD 95216	10:54.5	+12° 14'	I-12½	10300	.008		21 : 28	22 : 06	4	W2.[illegible]
31162	HD 95241	10:54.7 (58.5)	43° 27' (43° 07')	I-12½	10300	.008		22 : 10	22 : 33	4	W3.22
31163	MHα 328-116	19 55.0	+39 41	I-12½	Ia O	.008		23 : 03	01 : 03	4	E3:07
31164	γ Her Focus Test	16 17.5	19 23	"	103a O	.008		01 : 15	01 : 26	1	[illegible]

Dome Temp. 46°F

Focus 12.65

Dome Temp. 39°F

Transparency Conditions VERY GOOD some cirrus

* TELEPHONE IN DOME DOES NOT WORK.

0:45 Clouds

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
[illegible]	3	W1:37	25° 41'	2-5"	mv 6.04	Am	1-2-1	FBSC Set 2 20/8	FINE
[illegible]	3	W1:54	34° 12'	2-3"	5.72	g67	1-2-1	FBSC " 5 20/14	FINE
[illegible]	3	W1:57	26° 56'	~3"	6.30	A1n	1-2-1	FBSC " 9 20/8	FINE
[illegible]	[illegible]	W2:15	24° [illegible]	~3	?	?	1-2-1	" Set 2 (guided to one side) 20/?	EXP. OK
[illegible]	4	W2:53	11 54	~4"	6.40	F5	1-2-1	FBSC " 5 20/14	FINE
[illegible]	4	W3:22	43 07	~5"	6.03	dG0	1-2-1	FBSC " 9 20/14	FINE
[illegible]	4	E3:07	39 44	2-5	11?	em	2-	Fem* " 5 brighter than 'a' in field 800/25.	SL. WEAK *
								clouded out @ 0:45	FINE
[illegible]		W0"52	19 15	5	4.4	A9III	1-2-1	MK Std Set 5 thru cloud 20/8	V. SL. C TO UT.
							3/4	Set 9 Clouded right out	

2 loaded P.H. in N.P.

* Iao plates are slightly fogged due to age.

Date Fri May 24-25 /65 **Observer** L-Ne / Hb **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
31165	HD 106926	12 12.7	+ 15 42	I · 12½	103 Ao	Set .008	16.0	20 56 (48)	21 44	3
31166	" 115295	13 31.0	+ 44 43	"	"	"	16.0	22 02 (20)	22 22	4
31167	" 125338	14 14.8	+ 39 14	"	"	"	16.0	22 34 (18)	22 52	1
31168	" 127043	14 24.1	+ 28 44	"	"	"	16.0	23 03 (36)	23 39	2
31169	" 133408	14 59.2	+ 05 53	"	"	"	16.0	23 51 (61)	00 52	3
31170	HD 161701	17 41.9	− 14 42	"	"	"	16	01 01 (13)	01 14	4
	focus test.		0T3 / 17A							
31171	HD 176318	18 54.6	+ 38 07	"	"	"	16	01 20 (4)	01 24	1
"	"	"	"	"	"	"	15.8°C	03 20	03 29	"
31172	Nova Vul	19 43.8	+ 26 56	I 12½	103aO	.008	16	01 30 (48)	02 18	2
"	"	"	"	"	"	"	"	02 19 (24)	02 43	"
31173	Nova Del.	20 37.7	+ 18 55	"	"	"	"	02 48 (11)	02 59	3
"	"					"		03 00	03 07	"
								03 07 (5)	03 12	

→ 1 Ph. loaded north pier ←

Dome Temp. 51°F

Focus 12.65

Dome Temp.

Transparency Conditions Excellent

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS		Quality
1 21 W	15 20	0-1	6.40	K0	1-2-1	FBSP [illegible]	20/14	FINE
0 42 W	44 29	1-2	6.63	F0	1-2-1	" "	20/14	FINE
0 27 W	38 56	1-2	6.40	G5	1-2-1	" "	20/14	FINE
1 06 W	28 27	1-2	7.45	A0	1-2-1	" "	20/8	GOOD
01 40 W	05 44	2-3	7.06	F0	1-2-1	" "	20/14	FINE
00 38 E	-14 42	2-3	6.0	B9	1-3	B8-9 SB Set 2	20/8	GOOD
					7/4	" 6		FOCUS OK
01 38 E	38 13	2	5.6	B6V	2-2	B8-9 SB Set 2	20/8	FINE
00 26 W	38 14		"	"	2-2	5	20/10	FINE
01 35 E	+27 06	1-2	~6	red	2-2	Set 2 field check OK	20/15	FINE
01 10 E	"	"	"	"	2-2	" 5	20/7½	
01 46 E	+19 02	1-2	~5		2-2	Set 2	20/15	FINE
01 39 E	"				2-2	" 5	20/10	
01 34 E	"	"	"		4	" 9	20/5	

VISITORS 155 showed Jupiter, slides in dome,
AC PL; NY

Date ~~Sat~~ May 25-26 **Observer** GS NY **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
31174	HD 133962	15h 02.1	+48° 32'	I-12½	103 A O	.008	14.8	23 47	23:55	1
31175	HD 133388	14h 59.1	+60° 36	I-12½	"	"	"	00 02	00.07	2
31176	HD 161701	17h 41.9	-14° 47	"	"	"	"	00 30	00 48	3
31177	HD 165814	18h 02.7	-25 29	"	"	"	"	00 57	2 23	4
31178	NOVA VUL	19 43.8	+26 56	"	"	"	"	02 41	03 36	1

FOCUS TEST OTB/LTA

Dome Temp. 46°F
Focus 12.65
Dome Temp. 41°F

Transparency Conditions GOOD

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS		Quality
00 49W	48° 16	2-3	5.52	A0	1-2-1	FBSP SET 5	20/8	FINE
01 06W	60° 19	"	5.85	A2	1-2-1	" SET 2	20/8	FINE
01 00 E	-14° 44	"	6.0	B9I	1-2-1	Bright S.B. SET 2	20/8	FINE
00 11 W	-25° 29	3-4	6.6	B5V	2-1-1	" " SET 2	20/8	FINE
00 07E	27 07	4-5	~6	?	1-2-1	SET 2	20/7.5	SL WEAK
						HAZE THICKENING		
						CLOUDS IN N.E.		
					7/4			FOCUS OK

RA slipping (R.A. clutch?)

#2,3 P.H. loaded (in North Pier)

57

Date ~~June~~ 3/4 Mon/Tues 1968 **Observer** Hb, Ne, Jeffers **Julian Day** ....

Dome Temp.
Focus 12.
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
31179	HD 110951	12h 40.6m	+8° 13′	I 12½	103aO	.008	17°C	21 10 (20 54)	(30) 21 24	2	01 13 W
31180	HD 112097	12 48.8	+12 58	"	"	"	"	21 33	(24.5) 21 57½	"	01 [illegible] W
31181	HD 113248	13 01.5	+21 41	"	"	"	"	22 10	(37) 22 47	"	[illegible] W
31182	HD 124570	14 09.3	+13 26	"	"	"	"	22 54	(20) 23 14	3	[illegible] W
31183	HD 129174	14 36.0	+16 51	"	"	"	"	23 20	(4) 23 24	"	[illegible] W
31184	HD 129175	14 36.0	+16 51	"	"	"	"	23 26	(13) 23 39	"	01 11 W
31185	HD 132772	14 55.8	+39° 40′	"	"	"	19°C	23 49	(13) 00 02	4	[illegible] W
31186	HD 161701	17 41.9	−14 42	"	"	"	"	00 17	(20.5) 00 37½	1	[illegible] E
31187	HD 176318	18 54.6	+38 07	"	"	"	"	00 50	(9) 00 59	2	[illegible]
31188	16 Sgr	18 09.3	−20 25	"	"	"	"	01 10	(21) 01 31	3	[illegible]
31189	Nova Vul	19 43.8	+26 58	"	"	"	"	01 42	(62) 03 02	4	[illegible]
31190	HD 176318	18 54.6	+38 07	"	"	"	"	03 11	(8) 03 19	1	[illegible] W

Dome Temp. 51°F

Focus 12.65

Dome Temp.

Transparency Conditions Good on opening up / Poor by 2050 then clearing

[FRANK: exposuremeter does not return to zero when top of scale is reached] OK H

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp. 1-2-1	REMARKS		Quality
01 13W	+7° 52'	2"	5.2	Am	2-2	Set 2	Fitzgerald Bright + clouds	20/8 FINE
01 39W	+12° 37'	~2"	6.25	Am	2-2	" 5'	"	20/8 FINE
02 15W			~6.3	dF1	4	" 9	"	20/14 FINE
01 35W	+13° 08'	~3"	~6	dF6	2-2	Set 2	"	20/14 FINE
01 18W	+16° 36'	~3	4.9	Ap	2	" 5'	"	20/8 FINE
01 33W	+16° 36'	~2"	5.8	Am	2-2	" 9	"	20/8 FINE
01 41W	+39° 24'	~2-3"	~6.0	F2	2-2	Set 2	"	20/14 FINE
00 37E	+14° 42'	3+"	6.0	39I	2-2	Set 2	38-9 SB	20/9 FINE
01 25E	+38 14		5.6	36V	4	Set 2	"	20/9 FINE
05 08E	-20° 22'	~4"	6.0	09II	4	set 2	MK Std. ½ normal	20/5 WEAK
00 10E	+27° 06'	~3'	V~6.	—	2-2	Set 2	[illegible] OK	20/15 FINE
00 55W	+38° 13'	~2"	5.6	36V	2-	Set 2	38-9 SB	20/9 FINE

Ph #2, 3, 4 loaded in with grey

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Date Tues - Wed 4-5 June 1968 Observer G.S. - M.S. Julian Day

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle
31191	HD119126	13:36.3	+23° 00	I-12½	103a0	.008	22.6°C	21:07	(10) 21:17	2	W0:13
31192	HD110914	12.40.4	45° 49′	I-12½	103a0	.008	"	22:13	(10) 22:23	2	W2 17
31193	HD 111133	12:42.0	+6° 30′	I 12½	103a0	.008	"	22:30	(16) 22:46	2	W2:38
31194	HD 111421	12:44.1	+49° 01′	I-12½	103a0	.008	"	22:54	(16) 23:10	3	[illegible]
31195	HD111862	12:47.2	+17° 37′	I-12½	103a0	.008	"	23:23	(34) 23:57	3	W3:44
31196	HD 114889	13:08.4	+19° 15′	I-12½	103a0	.008		0:02	(20) 0:22	3	W3 47
31197	HD176318	18:54.6	38° 07′	I-12½	103a0	.008		0:31	(12) 0:43	4	E:36
31198	HD161701	17:41.9	-14° 42′	I-12½	103a0	.008		0:53	(30) 1:23	4	W1 [illegible]
31201	HD 176318	18:54.6	38° 07′	I-12½	103a0	.008		[3:10	(10) 3:20]	4	W1 31
31199	NOVA VUL.	19:43.8	26° 56′	I-12½	103a0	.008		1:31	(70) 2:41	1	E0:22
31200	NOVA DEL	20:37.7	+18° 48′	I-12½	103a0	.008		2:47	(12) 2:59	2	E:04
"	"	"	"	"	"	"		2:59½	(5) 3:04½	2	E0:54

Dome Temp. 62° F

Focus 12:65

Dome Temp. 53° F

Transparency Conditions Very good. → Excellent.

EXP. MTR MALFUNCTION: APPEARS AS THOUGH PMT. NOT GETTING HIGH VOLTAGE ALTHOUGH H.V. POWER SUPPLY SEEMS OK.

Hour Angle End	Declination		Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS			Quality
W0:13	22°	39'	2-3"	5.63	gG9	1-3	FBSC	set 2		FINE
W2:17	45°	37.5'	2-3"	4.8	C	1-2-1	← FBSC *	5	FIELD DRAWN	WEAK
W2:38	+6°	09'	"	6.35	Ap	1-3	FBSC	9		SL. WEAK
3:01 W	+48°	39'	3-4"	6.27	Am	1-3	FBSC	2		SL. WEAK
W3:44	+17°	16'	3-4"	6.38	gM0	1-2-1	FBSC	5	FIELD DRAWN	SL. WEAK
W3:47	+18°	55'	3-4"	6.27	K1	1-3	FBSC	9	FIELD DRAWN	FINE
E1:36	38°	13'	2"	5.6	B6V	1-3	B8-B9 (SB)	2		FINE
W0:15	-14°	41'	3-4"	6.0	B9I	1-3	B8-B9 (SB)	5		FINE
W1:01	38°	13'		5.6	B6V	1-	B8-B9 (SB)	9		FINE
E0:28	+27°	06'	~3"	?	NOVA	1-2-1		5	FIELD DRAWN	SL. WEAK
E1:04	+19°	03'	2-3"	?	NOVA	1-3		2		FINE
E0:54						1		6		WEAK

NO P.H. LOADED

* LOST ~ 1 HR: ELECTRICIANS LEFT TEST TROLLEY IN THE WAY - JAMMED BY DOME - CALLED GERRY

Date Wed Thur June 5-6/68 **Observer** Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
31202	HD 118660	13 33.2	+14 48	12½	103a0	.008	27°C	20:55 (18)	21:13	1	0h17W
31203	HD 118839	13 34.2	+18 46	12½	103a0	.008		21:17 (27)	21:44	1	0h47W
31204	HD 121980	13 53.8	+15° 08	12½	103a0	.008		21:47 (22)	22:09	1	0h53W
31205	HD 125040	14 11.9	+20° 35	12½	103a0	.008		22:14 (25)	22:39	2	1h05W
31206	HD 125180	14 12.7	+15 44	12½	103a0	.008		22:43 (27)	23:10	2	1h35W
31207	HD 131473	14 48.7	16 07	12½	103a0	.008		23:15 (21)	23:36	2	1h55W
31208	HD 161701	17 41.9	-14° 42'	12½	103a0	.008		23:44 (11)	23:55	3	1h10E
31209	HD 165814	18 02.7	-25° 29'	12½	103a0	.008		00:02 (38)	00:40	3	0h45E
31210	HD 176318	18 54.6	+38° 07'	12½	103a0	.008		00:47 (5)	00:52	3	[illegible]E
A31211	HD 161701	17 41.9	-14° 42'	12½	103a0	.008	27.1°C	01:05 (11)	01:16	4	0h2W
31212	NOVA VUL	19 43.8	+26°56'	12½	103a0	.008		01:39 (53)	02:32	1	0h33E
A31213	HD 176318	18 54.6	+38° 07'	12½	103a0	.008		02:39 (7)	02:46	4	0h30W
31214	ν Aql	19 21.4	+00 08	12½	103a0	.008		02:55 (4)	02:59	2	0h11W
31215	NOVA DEL	20 37.7	+18°55	12½	103a0	.008		03:10 (13)	03:23	3	0h35E
"	"	"	"					03:23 (7)	03:30	3	0h49E
31215F.	focus test		07 B/ 17 A								

Dome Temp.
Focus
Dome Temp.

Dome Temp. 68° F
Focus 12.65
Dome Temp. 58° F

Transparency Conditions excellent

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
						900 v	
0h 17W	+14 30		6.31	gF0	1-2-1	FBSC set 2 20/14	FINE
0h 47W	+18 27		6.31	gK6	1-2-1	" set 5 20/14	SL. WEAK
0h 53W	+14° 49'	2-3	6.01	gK5	1-2-1	" set 9 20/14	SL. WEAK
1h 05W	+20° 17		6.30	dF5	1-2-1	" set 2 20/14	FINE
1h 35W	+15° 26'		5.86	gM3	1-2-1	" set 5 20/20	SL. WEAK
1h 25W	+15° 52	3-4	6.35	dF9+dF9	1-2-1	" set 9 20/14	FINE
1h 10E	-14° 42		6.0	B9I	1-3	B8-B9 (SB) set 2 20/8	SL. WEAK
0h 45E	-25 27		6.6	B5V	1-3	B8-B9 (SB) set 5 20/8	WEAK
1h 24E	+38° 13'		5.6	B6V	1-3	B8-B9 (SB) set 9 20/8	SL. WEAK
0h 12W	-14° 41'		6.0	B9I	1-3	B8-B9 (SB) set 2 20/8	SL. WEAK
0h 33E	+27° 06	2-3	nova		1-2-1	field drawn set 2 20/15	SL. WEAK
0h 30W	+38° 14'		5.6	B6V	1-2-1	B8-B9 (SB) set 5 20/8	SL. WEAK
0h 16W	+00° 17		5.2	F2Ib	3-1	MK STD. ½ x N set 2 20/7	SL. WEAK
0h 35E	+19° 05'		nova		1-2-1	set 2 20/14	FINE
0h 29E	+19° 05'				1-2-1	set 5 20/7	WEAK
					8/4	* on the same plate set 9 NO loaded plate holder	OK

Date June 6/7 Thurs/Fri **Observer** Hr-Hk **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
31216	HD 116581	13h 19.4m	+37° 33′	I-12½	103aO	.008	28°C	21:17 (42)	21 59	1
31217	" 127065	14 24.1	36 39	"	"	"		22 05 (34)	22 39	2

Dome Temp. 68°F ① MIRROR HEAT TIMER RESET. ② INSTRUMENT ROOM TOO HOT !! WINDOWS OPENED.

Focus 12.65

Dome Temp.

Transparency Conditions GOOD

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS −900 V.	Quality
[illegible]	1	01:21 W	+37 13	2−3	mv 6.17	gM4	1-2-1	FBSC SET 5 40/40	FINE
[illegible]	2	?	+36 21	^	6.06	Ko	2-1-1	" " 5 40/29	FINE

2240 → 0200 TROUBLE WITH RA SETTING MOTOR CLUTCH, NO [illegible]

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Date June 7-8 1968 Fri-Sat **Observer** L - Rs - Sc **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle
31218	HD 176318	18^h 54.6^m	$+38°$ $07'$	G 12	103a O	.008	25.5 °c	0148^m (19)	1.07^m	3	[illegible]
31219	HD183143	19^h 23.0	$+18°$ $05'$	G 12	103a O	.015	54 =	1:20 (126)	[illegible]	2	[illegible]

Dome Temp.
Focus
Dome Temp.

Dome Temp. 65°F

Focus 12.65

Dome Temp. 54°F

Transparency Conditions quite hazy

RA setting repaired by L

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS		Quality
1:01E	+38° 13'	5"	5.6	B6 V	1-2-1	Sp. Binary B8-B9	20/10	FINE
0:50W	+13° 14'	5"	6.7	B7 Ia	1-2-1	MK standard normal	20/10	WEAK

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JUNE 8: 160 VISITORS: SHOWED JUPITER FIRST GROUP (OK)
" M13 2nd GROUP (MUCH TOO FAINT TO IMPRESS WITH FULL MOON, MEDIOCRE SEEING)

Dome Temp.
Focus
Dome Temp.

Date June 8-9/68 Sat/Sun **Observer** GS / Ne **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I	Hour Angle End
31220	HD 128332	14 31·3 (33·3)	+57 30 (57 12)	I 12	103aO	008	22.2°C	23 56 (32)	00 28	4	[illegible]
31221	HD 128998	14 35·1 (37·3)	+54 27 (09)	"	"	"	"	00 36 (10)	00 46	1	[illegible]
31222	HD 129002	14 35·1 (37·3)	+44 50 (32)	"	"	"	22.7°C	00 51 (9)	01 00	2	[illegible]
31223	HD 131040	14 46·3 (48·5)	+51 47 (31)	"	"	"	"	01 10 (38)	01 48	3	[illegible]
31224	HD 131041	14 46·3 (48·5)	+49 08 (48 42)	"	"	"	"	01 58	02 36	4	[illegible]
31225	NOVA VUL	19 43·8	+26 56'	"	"	"	"	02 46	03.09	1	?
31225 F	FOCUS TEST		0TB/1TA								

Dome Temp. 58° F

Focus 12.65

Dome Temp. 59° F

Transparency Conditions HAZY
BAD AFTER 1:00 (SEEING GOOD)

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS		-900 V.	Quality
2 47 W	+57 13	2"-3	6.28	F5	1-2-1	FB SC.	SET 2	20/14	FINE COMPAR. WEAK
03 01 W	+54 09	"	5.48	A0	1-2-1	"	SET 5	20/8	FINE WEAK COMP.
03 15 W	+44 31	1-2	5.36	A0	1-2-1	"	SET 5	20/8	FINE WEAK COMP
03 53 W	+51 32	1-2	6.36	dF4	1-2-1	"	SET 5	20/14	FINE
04 41 W	+48 52	2"-3	5.60	dF5+dF5	1-3	* "	SET 5	20/14	FINE
?	+27 06	"	NOVA		1-3		SET 5	20/5	WEAK
						HEAVY HAZE (FULL MOON NOT VISIBLE)			
					7/4		SET 9		SL.C TO VI.

#2 P.H. [illegible] (IN NORTH PIER)

*DOUBLE STAR (DONE THE ONE WITH LOWER DECL., i.e. STAR NOT DONE WAS ABOVE THE SLIT)

69 June 15/16 Visitors: no object shown (cloudy)
65 - 1st ; 74 - 2nd. Bn, Bb, Dy

Date ~~Sun~~ Mon ~~June~~ 16/17 **Observer** Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
31226	HD 128198	14 30.6	+37 04	12½	103a0	.008	17°C	21:08 (34)	21:42	1	5 34
31226F	focus test			0+B/NA						1	

Dome Temp.
Focus 12
Dome Temp.

Dome Temp. 47°F
Focus 12.65
Dome Temp.

Transparency Conditions clouds in north

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
						900 √	
0h 34W	+36 48	+	6.11	gk5	1-2-1	F.B.SC set 2 20/13	BLACK*
						clouded over	
					8/4	set 5	OK
						1 loaded P.H in N.P	
						#1 P.H. in fig	
						* REMAINDER OF UNEXP. PLATES APPEAR OK.	

Date 19-20 June /6.8 Wed-Thurs **Observer** "s", Pl, Ri, Mse **Julian Day** ....

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
31227	NGC 5904	15:16.9	+2° 13'	NEWT	103a0			9:26:05	9:28:05		E0:13
31228	5634	14:27.8	-5° 50'					9:34:00	9:44:00		W0:49
229	6218	16:45.4	-1° 54'					9:54.12	9:56.12		E1:3
230	6254	16:55.3	-4° 04					(2) 10:03.55	10:05.55		E1:13
231	5897	15 15.5	-20° 52'					(10) 10:14.26	10:24.26		W0:45
232	5634	14 27.8	-5° 50					(14) 10:30.10	10:44.10		W1:02
233	"	"	"					(14) 10:46:43	11:00.43		W1:58
234	5897	15:15.5	-20° 52'					(10) 11:13.02	11:23.02		W1:44
235	6402	17:35.8	-3°13'					11 27:37	11:39:37		E0:19
236	6366	17:25.9	-5° 02'					(10) 11:45.25	11:55.25		W0:00
237	6356	17:21.6	-17°47					(8) 12:04:30	12:12.30		W0:28
238	6093	16:15.0	-22°55					(8) 12:16:20	00:24:20		W1:31
239	6356	17:21.6	-17°47					(8) 00 32.10	00:40.10		W1:56
240	6342	17:19.2	-19°33'					(14) 00:46.17	01:00.17		W1:17
31241	6356	17:21.6	-17°47					(8) 01:05.50	01:13.50		W1:29
31242	6401	17:36.5	-23°53					(12) 01:21.17	01:33.17		W1:33

Dome Temp. 49°F

Focus

Dome Temp.

Transparency Conditions very good

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Exp (min) ~~Comp.~~	REMARKS	Quality
E0:13					2		
W0:49					10	golf range lights bad	
E1:13					2		
E1:13					2	Linda guiding	
W0:45					10	Thank goodness!	
W1:02					14	10:30 EST → golf lights out!	
W1:08					14	focus star (2 dib)	
W1:44					10 }		
E0:19					12 }	BAD (INTERMITTENT) DRIFT IN R.A.	
W0:06					10	took two counterweights off	
W0:28					8		
W1:31					8		
W0:56					8	R.A. OK NOW	
W1:17					14		
W1:29					8	seeing ↓	
W1:33					12		

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Date 19-20 June/68 Wed-Thurs **Observer** S., Pl., Ri., Msc **Julian Day** ....

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
31243	6356	17:21.6	-17°47'					01:38.38	8 01:46.38		W2:02
31244	6402	17:35.8	-3° 13'					01:51.27	12 02:03.27		W2:04
31245	7089	21:31.7	-0° 58'					02:15.45	2 02:17.45		E1:37
31246	6656	18:34.3	-23°58					02:29.16	4 02:33.10		W1:35
31247	6626	18:22.5	-24°54					02:55.30	6 03:01.30		W[illegible]
31248	7089	21:31.7	-0°58					3.09:30	3:11:30		E0:44
31249	7089	"	"					03:15.14	03 15.44		E0:[illegible]

Dome Temp. ....

Transparency Conditions ....

Focus ....

Dome Temp. 44°F

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
W2:02					8	clouds in the S.W.	
W2:04					12		
E1:37					2	Linda guiding	
W1:35					4	clouds passing by	
W2:16					6	waiting for clouds to pass	
E0:44					2		
E0:38					0.5	Splendid night, despite a few clouds	

Date June 20/21/68/Thurs-Fri **Observer** S-Pl-Ri-Hr **Julian Day** ....

Plate No.	Object	R.A. ~~1900~~ 1966	Declination ~~1900~~ 1966	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
31250	NGC 5904	15 16.9	+0213	Newt.	103aO			21 22^{10}	21 24^{10}	1	E0h10
31251	5634	14 27.8	-0550					21 31^{05}	21 43	2	W0h55
31252	6218	16 45.4	-0154					21 50^{35}	21 54^{35}	1	E1h[illegible]
31253	6254	16 55.3	-0404					22 00^{05}	22 04		E1h[illegible]
31254	5904	15 16.9	+0213					22 10^{15}	22 12^{15}		E1h04
31255	5897	15 15.5	-2052					22 18^{50}	22 23^{50}		W0h54
31256	6366	17 25.9	-0502					22 35^{30}	22 45^{30}		E1h00
31257	6402	17 35.8	-0313					22 50	23 02		E0h54
31258	5634	14 27.8	-0550					23 08^{20}	23 20		W2h33
~~31259~~	~~5897~~	~~15 15.5~~	~~-2052~~					—	—		—
31259	6535	18 02.1	-0018					23 38	23 50		E0h38
31260	6356	17 21.6	-1747					23 58^{30}	00 04		W0h24
31261	6093	16 15.0	-2235					00 22^{30}	00 30^{30}		W1h55
31262	6366	17 25.9	-0502					00 34^{50}	00 44^{50}		W1h00
31263	6402	17 35.8	-0313					00 50	01 02		W1h07
31264	6356	17 21.6	-1747					01 06^{10}	01 14^{10}		W1h33

Dome Temp.
Focus
Dome Temp.

Dome Temp. +45°F

Focus

Dome Temp.

Transparency Conditions V. Good

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	EXP. ~~Comp.~~	REMARKS	Quality
E 0ʰ12					2ᵐ	focus * α Ser UNGUIDED Seeing Poor	
W 0ʰ55					12ᵐ		
E 1ʰ11					4ᵐ	Pl Guiding	
E 1ʰ11					4ᵐ	" "	
E 1ʰ24					2ᵐ	2 Searchlights.	
W 0ʰ54					10ᵐ		
E 1ʰ00					10ᵐ	Pl Guiding 2238 Golf Lights off	
E 0ʰ54					12ᵐ		
W 2ʰ33					12ᵐ		
—					—	Thin Cloud in S.W.	
E 0ʰ32					12ᵐ		
W 0ʰ24					8ᵐ		
W 1ʰ55					8ᵐ	focus * η Oph AB Focus OK	
W 1ʰ00					10ᵐ	Pl Guiding	
W 1ʰ07					12ᵐ		
W 1ʰ33					8ᵐ		

Date June 20/21/68 Contd. **Observer** S-Pl-Ri-Hr **Julian Day**

Plate No.	Object	R.A. ~~1900~~ 1966	Declination ~~1900~~ 1966	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
~~31265~~	NGC ~~6626~~	~~18 22.5~~	~~-24 54~~	Newt	103aO			———	———		——
31265	6535	18 02.1	00 18	"	"			01 21^{35}	01 33^{35}		W1"12
31266	665.6	18 34.3	-23 58					01 42^{30}	01 46^{20}		W0"53
31267	6544	18 05.3	-25 01					01 53^{10}	02 03		W1"39
31268	7089	21 31.7	-00 58					02 13^{35}	02 15^{35}		E1"35
31269	6838	19 52.0	+18 40					02 25^{15}	02 29^{15}		W0"18

Dome Temp. +38°F

Focus ....

Dome Temp. ....

Transparency Conditions ....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	EXP Comp.	REMARKS	Quality
—					—	SKY MUCH BETTER	
W 1h12					12m		
W 0h53					4m	Filling in in southwest	
W 1h39					10m		
E 1h35					2m	Pl guide Filling in in [illegible]	
W 0h18					4m	" " Clouds everywhere now	

Date JUNE 22/23 1968 (SAT./SUN.) **Observer** GS - Ne **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
31270	HD 161701	17 41.9	-14° 42'	I 12½	103 aO	.008	14.9°C	23:30	(20) 23:50	2
31271	HD 165814	18 02.7	-25° 29'	"	"	"	"	23:59	(46) 00:45	1
31272	HD 183143	19 23.0	+18° 05'	"	"	"	"	01:09	(29) 01:38	2
31273	HD 183143	19 23.0	+18° 05'	"	"	"	15.9°C	01:59	(49) 02 48	3
31274	NOVA VUL.	19 43.8	+26° 56'	"	"	"	"	02:54	(36) 03 30	4
31274 F	FOCUS TEST	OTB/	ITA							

Dome Temp. 46° F
Focus 12.65
Dome Temp.

Transparency Conditions HAZY

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00 05E	−14° 41′	2-3″	6.0	B9 I	1-2-1	BRIGHT SP. BIN. SET 5 20/8	weak
00 26W	−25° 27′	4-5″	6.6	B5 V	1-2-1	" " SET 5 20/8	weak
00 00	+18° 15′	2-3″	6.7	B7 Ia	1-2-1	M.K. STANDARDS SET 5 20/12	weak
						CLOUDY	
01 10 W	+18° 15′	2-3″	6.7	B7 Ia	1-2-1	M.K. STANDARDS SET 5 20/28	fine
01 33 W	+27 08	"		NOVA	1-3	SET 5 20/8	weak
					7/4	SET 9	SL. C TO RED.

#1 P.H. LOADED (IN NORTH PIER)

SLOW R.A. CONTROL DOES NOT WORK

Date June/24/25/68 Mon Tues **Observer** Ri Ne **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
31275	HD139892	15 35.6	+36 58	12½	103a0	.008	22°C	21:20	(9) 21:29	1	0h 4E
31276	HD145001	16 03.6	+17 19					21:36	(33) 22:09	2	0h 22E
31277	HD156014	17 10.1	+14° 30					22:14	(12) 22:26	2	0h 52E
31278	HD161701	17 41.9	-14° 42					22:49	(34) 23:23	3	0h 3E

Dome Temp.
Focus 12.
Dome Temp.

Dome Temp. 54°F

Focus 12.65

Dome Temp.

Transparency Conditions very hazy

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
21:2?	1	0^h 14E	+36° 45′	2-3	5.1	B8n	1-2-1	set 5 20/10	fine
22:09	2	0^h 02E	+17 08	2-3	6.1	G4	1-2-1	Field drawn STD. VEL. set 2 20/18	fine
22:26	2	0^h 52E	+14 27		4.41	M5II	1-2-1	" " set 5 20/22	fine
22:33	3	0^h 25F	-14 40	B	6.0	B9I	1-3	clouds from S.W Bright Spect. Bin. set 2 20/15	too weak.

clouded out.

3 loaded P.H. in frig.

83 June 29/30 – Visitors: 67 1st, 60 2nd] – object show δ Her (separation 0."5) Bn, Dy, Bb

Date JUNE 29/30 1968 Sat/Sun **Observer** GS / Dy **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.	Hour Angle End
31279	HD 161701	17 41.9	−14° 42′	I 12½	103 aO	.008	19.9°C	2353	(27) 0020	1	0051 W
31280	NOVA VUL	19 46.6	+27° 07	I 12½	103 a O	.008	"	0055	(7) 0102	2	[illegible]
31281	η CEP	20 43.3	+61 27	"	"	"	"	0122	(4) 0126	4	0103 E
31282	λ CYG	20 43.5	+36 07	"	"	"	"	0155	(2) 0157	3	0035 E
31283	β AQL	21 26.3	−06 01	"	"	"	20.2	0211	(2) 0213	4	[illegible] E
~~31284~~	HD 207673	21 45.6	+40 40	"	"	"	"				
31284	ε CEP	22 11.4	+56 33	"	"	"	"	0238	(4) 0242	2	01[illegible] E
31284 F	FOCUS TEST		OTB / ITA								

Dome Temp. 58° F

Focus 12.65

Dome Temp. 56° F

Transparency Conditions HAZY

Ending Time E.S.T.	Pl.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
[illegible]	1	0051 W	14 42	~6" bad	6.0	B9I	1-2-1	Vy poor seeing; plate at 5 (hazy), 20/10	FINE
[illegible]	2	0030 W	+27 07	"	5.6	F	1-1	Some vy low clouds — fast moving (too faint to register)	BLANK
0126	[illegible]	0103E	+61 43	"	4.4	K0IV	1-2-1	Scattered clouds. 20/18 at 5	to hazy STRONG
[illegible]57	3	0032E	+36 22	"	4.5	B5V	2-2	check RA: Field drawn. ← 20/10 at 5 NOTE	FINE (WEAK COMP)
[illegible]	4	0101E	+05 43	4"	3.7	G0Ib	2-2	20/18	STRONG
					6.5	A2Ib		→ NEEDS FINDER FIELD. (Mag 13 CEP)	
[illegible]	[illegible]	0116E	+56 53	3"	4.5	F0IV	2-2	20/9 Still clouds scattered.	FINE
							7/4	CLOUDS	G. TO RED (BADLY)

PLEASE NOTE: SPARKS OCCUR IN THE DARK ROOM FROM THE TEMP. CONTROL EQUIPMENT (MAY HAVE HAPPENED FOR PLATE 31281)

Date July 1/2 Mon/Tues 1968 **Observer** HG **Julian Day** ....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.F	Hour Angle End
31285	HD161701	17h 41.9m	−14° 42′	I 12½	103aO	.008	25.4C	21 06	(37) 21 43	1	0 11E
"	"	"	"	"	"	"	"	23 13	23 44	"	00 23W
31286	HD139389	15 32.8	+30 19	I 12½	103aO	.008	"	21 47	(57) 22 44	2	0 13W
31287	Nova Vul	19 43.8	+26 56	"	"	"	"	00 05	(14) 00 19	3	
"	"	"	"	"	103aO	.012	"	00 21	(01 52)	3	[illegible]

Dome Temp.
Focus
Dome Temp.

Dome Temp. 63°F
Focus +2.65
Dome Temp.

Transparency Conditions Good (same Ci)

[FRANK: DEC. TV. NOT WORKING] OK JWW 3/19 Hr

Ending Time EST.	P.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS		Quality
[illegible]	1	01 45 E	−14° 41′	~2-3″	6.0	B9 I	1-2-1	Set 2 BS-9 SB	20/10	FINE
[illegible]		00 23 W	"	"	"	"	2-2	Set 5 "	20/10	FINE
[illegible]	2	01 32 W	+30° 06′	~2-3″	~7.1	F5	2-2	Set 2 FitzGerald Bi*	20/14	FINE
[illegible]	3				~6.5	—	2-	Set 2	20/½	VERY WEAK
[illegible]	3	00 32 W	+27° 06′	~2″	~6.5	–	2-2	Set 5 (clouds) [illegible] complete cover	20/15	SL. WEAK

Closed up 0200 EST

4 Ph. loaded in 'frig

Date Wed-Thurs July 3/4/68 **Observer** Ri – SK **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
31288	HD 16170:	17 4.9	-14° 42	12½	103a0	.008	16°C	22 20	22 43	1	[illegible]
31289	HD 16584	18 02.7	-25 29					22 52	22 5[illegible]		
000— 1	α Lyr	18 35.9	+32 45		D1-2	28"		23:53	32 00 25		[illegible]
-2	ν Aql	19 24.9	+00° 15		E4-2	28"		0:30	50 1:20		[illegible]
-3	η Aql	19 50.7	+00° 55		E2-2	28"		1:25	40 2:05		[illegible]
-4	ε Peg	21 42.2	+ 9° 55		E2-2	28"		2:08	32 2:40		[illegible]
-5	β Aqr	21 29.4	-5 46		E2-2	28"		2.42	27 3:09		[illegible]
-6	α Aqr	$22^h 3.2^m$	-0° 30'		E2-2	22"		3:12	24 3:36		[illegible]
-7	35 Cyg	20^h 17.5	+34° 52'								

Dome Temp.
Focus
Dome Temp.

Dome Temp. 47°F

Focus 12:25

Dome Temp.

Transparency Conditions

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0H31 E	-14° 42'		6.0	B9I	1-2-1	B8-B9 SB set 2 20/10	FINE
			~~6.6~~	~~65V~~		~~s95 10/11~~	
0h 16m W		2	0.0			Stdd ink-trouble	
0h 3m E			5.0			ink-trouble again	
1h 0m W			4.1				
0h 53m E			1.5				
0h 6m E			3.0				
0h 9m E			3.2				

Note: wavelength scale [illegible] too [illegible] (4340 Å [illegible] to about 4720)

[illegible] PH [illegible]

[illegible]

July 6/68. Ai, Ny and Br/Go on visitors: Showed 140 visitors 1913 thru clear sky, slight cirrus at end. Showed slides in dome.

89

Date .... **Observer** .... **Julian Day** ....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
	9 July /1968						(dome temp)			
31288 F1	focus test in in		/ in & out	G-12	II a O	9	63°F			A
~~31288 T1~~	~~calibration strip wedge~~									
~~31288 T2~~	~~" " "~~									

Dome Temp. .... Sun. July 7 lights in the dome left on — left on by someone showing friends the telescope on Sunday afternoon.

Transparency Conditions ....

Focus ....

Dome Temp. ....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp. 1-2-1	REMARKS	Quality
				(no filter)			
					10/10		~~[illegible]~~ from OK
						~~DEV. 68°F/D-19/4 min~~	
						~~DEV 68°F/D-76m/5 min~~	

(Hd, Hk, Hs)

Date 10 July/68 (Wed) **Observer** Mce - RS **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Dome Temp. / Focus / Hour Angle End
31289	~~HD145001~~	~~16:03.6~~	~~+17° 19'~~	~~6-12~~	~~IIa0~~	~~14~~ SHORT	~~66°F~~	~~21:09~~	53 ~~22:02~~	A	
								~~2k.~~			
31290	~~N33A 5PC~~									A	
~~31290~~	~~HD183143~~	~~19:23.0~~	~~+18° 05'~~	~~6108~~	~~IIa0~~	~~15 L~~	64°F	~~0:26~~	[illegible]	A	
31290	HD 186882 Tn δ Cyg	19:41.8	44 53	6108	IIa0	15 L	64°F	0:44	0:55	A	W 0:10
31290 F1	focus test	in cir / out out		6108	IIa0	15				B	
31289 T1	calibration for plate no 31289										
	11 July 1968										
31290F2	focus test			6108	IIa0	15 L	66°F			A	
F3										B	
										C	focus 53

Dome Temp. 56°F
Focus
Dome Temp.

EX MTR MIRRORS ADJUSTED
W/LAMP – IMPROVEMENT [illegible]

Transparency Conditions VERY POOR

Ending Time E.S.T.	Pl.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
~~[illegible]~~	9		~~+17° 70'~~	~~3"~~	~~6.1~~	~~G4~~	~~3~~	~~Std Vel~~ ~~CLOUDS +~~ PEAKING EXP MTR. 200/9	BLANK
	8							TOO FAINT & POOR SEEING	
	A			~~10"~~	~~6.7~~	~~B7Ia~~		~~MK (focus 55)~~ 800/15	
0:55	A	W 0:10	45 05	10"	2.82	B9.5III	15	MK (G40 filter) 800/15	[illegible] STRONG
	B						5/5	(G10 filter) focus 56	CENTRE TO VIOL. [illegible]
							G10		
	A		~~[illegible]~~				5/5	focus 55	ok at 4900 to violet center
	B						5/5	53	"
	C						5/5	51	"

focus 55 / tilt · 1 full turn CW
tilt 1 (2) " " anti CW

* G-12 P.H. A LOADED + 1 turn anti-CW.

(to violet [illegible] ok at 4350

(Hd-Hb-Sc)
Date July 11/12 - Th/Fri 1968 **Observer** Go-Hr-Hk **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
31291	45 Boo	15 02.9	+25 16	G108	IIaO	15	69	21:19	(4) 21:23	A	0 20 W
31292	" "	"	"	"	"	"	"	21:25	(3) 21:27	B	01 24 W
31293	"	"	"	"	"	"	"	21:29	(2) 21:30	C	01 27 W
31294	β Her	16 25.9	+21 42	G12	IIaO	"		22 11	(3) 22:14		00 ?? W
58A-1 to 24								22:30	(5:00) 03 30		
31295	HD 10516 φ Per	$1^h 37.^m4$	+50° 11′	G12	IIaO	9	?	03 54	(12) 04 06	A	02 32 E
31295 T1	calibration wedge for 31295 :										

(1) Tilt full cw 1 back
(2) 2 back ⟶ best
(3)
(4) 3 back
(5) full, 3½ back

Tilt 2 ~~full~~ back from full cw (1) 6405
(2)
(3)
(4)
(5)

focus
36 75 — A
46 65
56 55
66 45 — C
96 35

Dome Temp. 59 °F

Focus 53

Dome Temp.

Transparency Conditions Good

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp. (3, 612)	REMARKS		Quality
01:20 W	+25°03′	~2″	4.9	F5V	3	MK Standard	800/7	OK
01:24 W	"	"	"	"	3	"	800/3	SL. WEAK
01:27 W	"	"	"	"	3	"	800/1	V. WEAK
00:48 W	+21°33′	"	~3.7	G8 III	no filter 3	KASC Hdbk	~~40~~/15	WEAK
						✕hair light on 4″ out.. Fixed		
02:32 E	+50°32′	~4″	3.95	B0p	3 (3 12) weak should be 3-3-3	Special star for 612	40/18 → 40/25 would probably give normal exposure	sl. weak

65°F focus 46 ~~Tilt cw+4~~

L cw+2 best

0 — good

M 2

N ~~4~~

66°F focus 46 Tilt cw+4

95

Date July 12/13 Fri Sat 1968 **Observer** Ri Bu **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
31296	HD 145001	16 03.6	+17 19	G12	IIaO	9	72°F	21 :03 (136)	23 :19	A	1h10W
31297	HD 187691	19 46.2	+10 10	G12	IIaO	9		23 :32 (135)	01 :47	C	0h05W
31298	NOVA DELPHINI	20 37.7	+18 55	G12	IIaO	9		01 57 (112)	03 :49	A	2h15W

Dome Temp.
Focus
Dome Temp.

Dome Temp. 62°F

Focus ....

Dome Temp. ....

Transparency Conditions occasional clouds + hazy

Ending Time E.S.T.	P.I.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS			Quality
3 18	K	2H 20 W	+17° 10'	~3"	6.1	G 4	5-5-5	Std. Vel	field drawn	200/240	WEAK
1:47	C	1H 05 W	+10° 23		5.8	F 8	5-5-5	" "		200/240	WEAK
1:49	A	2H 15 W	+19° 04		NOVA	A	5-5-5		very hazy	200/81	WEAK

P. H. C shrouded and in ref

(Ai, CH, Dy visitors) → $ CrB

Date July 13/14 SAT/SUN **Observer** (Hb) Dy, Ne **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
31299	Nov Del	20h 37.7	+18 55	G12	IIa-O	~~9~~ 13	70°F	23 26 (57)	0 23	C
31300	HD 198478	20 45.5	+45 45	G12	IIa-O	19	70	01 04 (51)	01 55	A
31301	ρ Cas HD 224014	23h 49.1	+56 57	G12	IIa-O	9	70	02 15 (68)	03 23	C
31302	φ Per HD 10516	1h 37.4	+50° 11	G12	IIa-O	9	70	03 40 (50)	04 30	C
31303 02F1	focus test									A

Dome Temp.
Focus
Dome Temp.
Hour Angle End

Dome Temp. 57°F

Transparency Conditions Poor

Focus

Dome Temp. 55°F

Ending Time E.S.T.	P.I.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp. (5-5-5, a 12 filt.)	REMARKS	Quality
[illegible]	[illegible]	1 06 E	19° 04	~2-3"	~6	[illegible]	5-10	just too cloudy for [illegible]. 200/34	VERY WEAK
[illegible]	[illegible]	0 20 W	+45° 59	~2-3	4.7	B2	5-5-5	scattered clouds, [illegible] [illegible]. 40/25	WEAK
[illegible]	[illegible]	1 [illegible] E	+57 19	~2-3	4.4	F8	5-5-5	40/50 clearer, bright moon.	(Gaussian) WEAK
[illegible]	[illegible]	2 [illegible] E	+50 31	~2.3	3.95	B0p	5-5	40/25 Dawn sky.	WEAK
								"IN"/"OUT" exposure, then "Out"/"In" inadvertently scrambled.	OK

Cross-hair illumination on [illegible] exposures doesn't work

99

Date July 14-15/69 Sun/Mon. **Observer** Smith **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I
~~3130~~4 05	HD 156014 ~~α¹ Her~~	~~17 10.7~~	~~+14 30~~	~~G 12~~	~~IIa0~~	~~9~~	~~—~~	~~22 17~~ (2)	~~01 39~~	A
3130~~4~~ 05	ρ Cas	23 49.4	56 57	"	"	13	72°F	02 14	(9) 03 48	C

#3130~~4~~ T1 calibration wedge for plates 31296 - 31303

~~3130~~4 T2 " " " " 31304

Dome Temp. +67°F

Focus

Dome Temp.

2300 Telescope [illegible]
25 lb. [illegible]

Transparency Conditions Poor – Haze

0200 Novo Del. [illegible]

Ending Time E.S.T.	P.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
[illegible]	–	~~2247 W~~	~~+14° 28'~~	~~2-3"~~	~~4.41~~	~~HS II~~	5-5-5	80 / 142 plate broken in holder (4 pcs.) BRIGHT STD VEL. PROG.	DID NOT DEVELOP [illegible]
[illegible]	✓	00 30 E	+57 20	"	4.4	F3 I p	5-5-5	80 / 100	WEAK

D – 70 / 70°F

Date 15-16 July '68 (Mon) **Observer** (Hb, Hk) Msa - Rs - Ne **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.P.	Hour Angle End
31304	(ARCTURUS) HD124897	14:14.2	+19° 42'	G12	II a0	9 L	78°F	21:06	(14) 21:20	A	W2:2[illegible]
31305	HD 161096	17:38.5	+4° 37'	G12	II a0	9 L		21:31	(108) 23:19	C	W0:56
31304 T2	calibration step wedge for plate # 31304										
31306	NOVA DEL.	20:37.7	+18° 48'	G12	II a0	13 S	77°F	23:34	(143) 01:57	A	W0:35
31307	φ PERS	01:37.4	+50° 11'	G12	II a0	9 L	74°F	02:12	(74) 3:26	C	E2:56
A31307T1	calibration for plates 31305-7										

Dome Temp. 70°F

Focus

Dome Temp.

Transparency Conditions VERY HAZY

00:30 EST : GOOD
01:30 cirrus from N.E.

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Filter	REMARKS	Quality
2:20	[illegible]	W 2:24	+19 24	3"	1.29	K2III p	12 - 12	G12	Bat. std. Vel. (Broken ~ 3/4" from 1 end) 40/160	FINE
3:19	[illegible]	W 0:56	+04° 37'	4"	3.93	K2III	8 - 8 - 8	G12	" " " 80/320	
									D-76 m / 72°F	
[illegible]	[illegible]	W 0:35	+19° 05'	4-5"	?	NOVA	8 - 8 -	G12	Becoming cloudy (02:00) 100/?	VERY WEAK
3:2[illegible]	[illegible]	E 2:56	+50° 22'	3"	3.95	B0 p	8 - 8 - 8	G12	HK * poor sky * 80/100	SL. WEAK

* BROKEN DURING EXP. (2 PCS)

(EXPOSED BOX # 3)

103 G108 — Test

Date 16 July 1968 **Observer** Sanium / Schmitt / Hulke **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
1				G108	IIaO	13	74°F			A
2										"
3										
4										"
5										"
										"
6										
7				G108	IIaO	7	76°F	Full aperture		A
8										
9										
10										
11										
12										
13										
14										
15										
16										
17							Hartmann Test			A

Dome Temp.
Focus
Dome Temp.
Hour Angle End

Dome Temp. 69 °F

Focus

Dome Temp.

Transparency Conditions

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Filter	REMARKS	Quality
focus 70		full aperture		inner / outer	35 / 35	12		
60				↓	↓			
(best) — 50							focus ~ 48-49 Tilt ~ OK	
40								
30								
focus → 60								
58								
56								
54								
52								
50								
48								
46								
44								
42								
40								
48								

Date July 19/20 1968 **Observer** Go Ri Hk **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
585-1 to 33	NGC 5033							2100 (6:10)	0340		
3308	α Per	1 37.4	+50° 11	G 12	IIa O	9	62°F	03 57 (27)	04 24	A	ME

Dome Temp.
Focus
Dome Temp.

Dome Temp. 54

Focus

Dome Temp. 50

Transparency Conditions

Hour Angle End	Declination		Seeing	Ptg. Mag.	Sp.	Comp.	Filter	REMARKS	Quality
1h 41 E	+50	33	5"	3.95	B0p	5-10	G12	40/B0	SL. WEAK

Go, Ch, Pl Visitors # of visitors 167 Object · Zeta Cor Bor

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Date JULY 20/21 1968 SAT/SUN **Observer** Go-Gs **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
586 - 1 to 22								2310	4:30 0340	

Dome Temp.
Focus
Dome Temp.
Hour Angle End

Dome Temp. 57°F

Transparency Conditions

Focus

Dome Temp. 53

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	FILTER	REMARKS	Quality

Date July 21/22 - Sun. /Mon. 1968 **Observer** HK/Ne **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
31309	α Oph HD 146051	$16^h 09^m.1$	−3°26′	612	IIa-O	9	73°F	21:40 (133)	23:53	A
31310	β Aql HD 204867	$21^h 26^m.3$	−6°01′	"	"	"	70°F	0:12 (115)	02:07	C
31310 F1	FOCUS	TEST					68°F			A
# 31310 T1	calibration	step wedge			IIaO					

ALUMINIZING

July 22 - 26 : lost 1 good night

Dome Temp. 63 °F

Focus

Dome Temp. 57 °F

Transparency Conditions Good

0:00 - clouds + haze

Ending Time E.S.T.	Pl.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Filter	REMARKS	Quality
:53		3 21 W	-3 33	3.4"	4.3	M1 III	8-8-8	G12	Br. Std Veloc. BROKEN NEAR ONE END 200/700	SL. WEAK
01:0?	C	0h 20m W	-5°42'	5"	3.73	G0Ib	8-16	G12	" " " 40/43	SL. WEAK
	/						←			EXTREMELY WEAK; NO "OUTSIDE" COMPARISON SHOULD BE 5/5, NO FILTER

AUTO GUIDER VIBRATES SOMETHING HORRIBLE

for plates 31308 - 31310

02:00 - CLOUDED IN

Monday: photometric
Tuesday: overcast
Wednesday: partly clear
Thurs: " "

Date JULY 26/27, 1968 FRID/SAT **Observer** GS – Bii **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
31311	HD 161096	17 38.5	+4° 37′	G 12	IIaO	009	72°F	21:26	(65) 22:31	A
31312	HD 186791	19 41.5	+10° 22′	"	"	"	70°F	22:52	(55) 23:47	C
31313	NOVA DEL	20 37.7	+18° 48	"	"	013	70°F	00:01	(134) 02:15	A
31314	φ PER	1 37.4	+50° 11′	"	"	009	68°F	02:38	(55) 03:33	C
31315	"	"	"	"	"	"	66°F	03:37	(18) 03:55	A

Dome Temp. 61° F

Focus

Dome Temp. 54° F

Transparency Conditions VERY HAZY & CLOUDS

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Filter	REMARKS		Quality
0 52W	+4° 39'	2-3"	3.93	K2 III	8-8-8	G12	13. S.V. (SKY IMPROVING)	40/160	FINE
0 05W	+10° 35'	1-2"	4.15	K3 II	8-8-8	"	13. S.V. (SKY GOOD)	40/165	FINE
1 37W	+19° 06'	1-2"	?	NOVA	8-8-8	"	FIELD DRAWN, PLATE BROKEN: 3 PCS.	200/100	WEAK
02 05 E	+50° 35'	1-2"	3.95	B0p	8-8-8	"	HAZY, THEN CLEAR	40/70	FINE
01 43 E	"	1-2"	"	"	8-16	"	PLATE BROKEN; 3 PCS.	40/16	WEAK

DOME FOUND UNCHAINED. NO ROPE

TELESCOPE UNBALANCED, TENDS TO FALL EAST

100 SETTING IN THE EXPOSURE METER DOES NOT WORK.

Go, BB, Dy Visitors - Total # 71 9:15
68 10:15
139 Cloudy - slides.

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Date July 27/28, 1968 Observer Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H

Dome Temp.
Focus
Dome Temp.
Hour Angle End

Dome Temp. ....

Focus ....

Dome Temp. ....

Transparency Conditions ....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality

Date ~~Sun~~ Mon ~~July~~ 28-29/68 **Observer** Ri Mc **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I
31316	HD156014	17 10.1	+14° 30	G12	IIaO	.009	66°F	20 34	(56) 22:00	A
31317	NOVA DELPHINUS	20 37.7	+18 55	G12	IIaO	.013		22 12	2 54 02:26	C
31318	ϕ Per	01 37.4	+50° 11'	G12	IIaO	.009		02:35	(62) 03:37	A

31318 T1 calibration step wedge for plates 31311–31318

Dome Temp.
Focus
Dome Temp.
Hour Angle End

Dome Temp. 54°F

Focus

Dome Temp. 40°F

Transparency Conditions good

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS		Quality
0 56W	+14 27	2-3	4.41	M5II	8-8-8	G12 B.S.V.	40/160	156.WK FINE-
1 57W	+19° 05	3-4	--	-	8-8-8	G12	200/150	WEAK
1 54E	+50° 33	4	3.95	B0p	8-8-8		40/70	FINE

10B. (setting) on exposure meter ~~[illegible]~~ acts funny
Repaired [illegible]

Date 29-30 July /68 // Mon-Tues **Observer** M — - Bü **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I	Hour Angle End
31319	HD 139892	15:35.6	+36° 58'	G-12	II a0	13		20:40	(71) 21:51	A	W2.27
31320	β OPH HD161096	17:38.5	+4° 37'	G-12	II a0	9	60°F	22:04	(75) 23:19	C	W1.52
31321	NOVA DEL.	20:37.7	+18° 48'	G-12	II a0	13		23:30	(200) 02:50	A	W2:24
31322	φ Pers	01:37.4	+50° 11'	G 12	II a0	9	54°F	3:04	39 03:43	C	E1:44
31322 F1	focus test	in in/out out		G 12	II a0	9				A	
31322 T1	calibration step wedge for plates 31319 - 31326										

Dome Temp. 50°F

Focus

Dome Temp. 39°F (DOME FOUND UNTIED)

Transparency Conditions EXCELLENT

Ending Time E.S.T.	P	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	G-12 FILTER Comp.	REMARKS	GAIN / COUNTS	Quality
2:5[illegible]		W2:27	36° 46′	~3″	5.1	B8m	6-6-6	Sp. Bin. (BROKEN: 3PCS)	100/175	SL. WEAK
23:19	C	W1:52	+4° 38′	2″	3.93	K2 III	8-8-8	Bst. std. Vel.	40/160	FINE
22:50	A	W2:24	+19° 05′	>4″	?	NOVA	6-6-6	—	200/106	WEAK
23:43	C	E1:44	+50° 33′	3″	3.95	B0p	8-8-8	HK *	40/70	SL. STRONG
	A						NO FILTER 5-5			SL. TO VS

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Dome Temp.
Focus
Dome Temp.

Date Tues. Wed July 30/31/69 **Observer** Hd - Ar - Hk **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
31323	HD 139892	15 35·6	+3658	G 12	IIaO	SHORT 13		2040	(76) 21 56	A	W 2½
31324	Chi Cyg	1970 19 49.4	1970 32 50	"	"	short 16	+63	22 05	(120) 0 05	C	W 33
31325	φ Per	1h 37.4m	+50° 11′	"	"	L9		0 27	(94) 0201	A	3321 E
31326	HD 204867	21 26·3	-0601	"	"	L9		02 37	(84) 0401	C	0235 W

Dome Temp. +49°F

Focus ....

Dome Temp. ....

Transparency Conditions GOOD (few clouds)

0300 SKY WORSE

Ending Time E.S.T.	Pl.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Filter	REMARKS	Quality
[illegible]	A	W 23	+36 47	V. POOR 6?	5.1	B8n	6-6-6		Spect. B in Brighter Comp. 200/200	FINE
[illegible]	C	W 33m	+32 53	3"	~7	M	4-4-4		for Dr Burrison (mica plate) BROKEN 2 pcs. ↑ 200/300	
[illegible]	A	0322 E	+50° 32′	6"	3.95	B0p	8-8-8		Hk * 40/70	SL. WK (GUIDING)
[illegible]	A	0250 W		6-7	3.98	G:Ib	8-8-8		BRIGHT STD. VEL. 40/23	VERY WEAK

(THERE MUST HAVE BEEN A THIRD PIECE: ~ 'SHORT')

Date August 1-2/68 Thurs-Fri **Observer** Hr-Hk **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I	Hour Angle End
31327	HD 186791	19 41.5	+10 22	G 12	IIaO	9		2323	69 0032	A	0114W
~~31328~~	φ Per	01 37.4	+50 11	"		9L		0051			PLATE
# 31326 T1	calibration	for plates 31323-31326									

Dome Temp. 50°F

Focus

Dome Temp.

Transparency Conditions Clearing at 22^h30 EST

Ending Time E.S.T.	P.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Filter	REMARKS	Quality
0032		0114 W	+1035	3-2	4.15	K3 II	8-8-8	G-12	BR. STD. VEL. BROKEN INTO 4 PIECES 40/160	* NOTHING
		PLATE DISCARDED			3.95	B0p			CLOUDS. 40/4	—

(1) Replaced switch for slit head illumination

(2) Repaired Vis. eyepiece x-hair illum.

* evidently, the G-40 camera was not swung out of position.

Date 2-3 Aug 1968 Fri-Sat **Observer** L - Sc **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
31328	HD156283 π Her	~~[illegible]~~ 17h ~~11.0~~ 11.6	+36 ~~50~~ 55	G108	IIa-O	13 x long		22 05	2½ 22 07 30	A	[illegible] 8.44
31329	HD180450	19h 11.5	+30 21	"	"	"		22 26	14 22 40	C	
31330	HD186791	19h 41.5	+10 22	G12	"	13		23 14	87 0:41	A	[illegible]

Dome Temp.

Focus

Dome Temp.

Dome Temp. 53°F

Transparency Conditions Partly Cloudy

Focus

Dome Temp.

Ending Time E.S.T.	P.E.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Filter	REMARKS		Quality
22 07 30	A	Focus 8.44		3 secs.	4.5	K3 II	none	G-12	test plate for G108	800/112	fine
[illegible] 40	C			3 sec	MV 5.86	gM0	none	"	" " "	800/50	[illegible]
[illegible]	A	1:26W	10 36	"	4.15	K3 II	6-8-8	"	Bright Std. Vel. clouds.	40/160	fine

total 125 | 75 81 / 56 | Sat Aug 3. Visitors: Bn - Dy - CH | Dec clamp jammed before first tour - fixed by Hk in time for second tour.

Date Aug 4/5 1968 Sun/Mon **Observer** GS / Ne **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
31331	HD159181 β Dra	17h 28m.2	+52° 23'	G12	IIao	013	75°F	20 49	13 21 02	A
31332	"	"	"	"	"	"	"	21 05	7 21 12	C
31333	α Oph	17h 30m.3	+12° 38'	"	"	"	"	21 24	2 21 26	A
31334	"							21 28	2 21 30	C
31335	HD 161096 (β Oph)	17h 38m.5	+4° 37'	"	"	"	74°F	*22 14	41 22 55	A
31336	HD 186791 (γ Aql)	19h 41m.5	+10° 22'	"	"	"		23 03	52 23 55	C
31337	HD 204867 (β Aqr)	21h 26m.3	−6° 01'	"	"	"	" 72°F	00 05	91 01 36	A
31338	HD 206778 (ε Peg)	21h 39m.3	+9° 25'	"	"	"	70°F	01 51	37 02 28	C
31339	HD 222368 (ι Psc)	23h 34m.8	+5° 05'	"	"	"	68°F	02 44	68 03 52	A
31340	φ Per	1h 37m.4	+50° 11'	"	"	009	67°F	04 07	26 04 33	C
31340T	Calibration step wedge for plates # 31330 – 31340									
								*21 30	22 14	SLIO

Dome Temp. 63°F

Focus

Dome Temp. 55°F

Transparency Conditions VERY HAZY

100 SETTING ON EXPOSURE METER STILL DOES NOT WORK

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Filter	REMARKS			Quality
00 10 W	+52° 21′	2-3″	~3.8	G2 II	8/8/8	GH2	MK STANDARDS	(1/2 x)	200/250	fine
00 20 W	"	"	"	"	8/8/8	"	"	(1/4 x)	200/125	1 weak
00 30 W	+12° 38′	"	2.24	A5 III	12-12	"	"	(1/2 x)	20/12	guiding fine
00 35 W	"	"	"	"	12-12	"	"	(1/4 x)	20/6	guiding weak
01 50 W	+4 39′	"	3.93	K2 III	8-8-8	"	BR. ST. VELOCITY	SKY BETTER	40/160	fine
00 49 W	+10° 35′	"	4.15	K3 II	8-8-8	"	"	(SKY BAD — 1 SH. PC. BROKEN OFF)	40/160	fine
00 45 W	-5° 40′	3-4″	3.73	G0 Ib	8-8-8	"	"	CLOUDY FOR ~1 HOUR (1 SH. PC BROKEN)	40/100	fine
01 24 W	+9° 47′	1-2″	3.98	K2 Ib	8-8-8	"	"	SKY BETTER	40/160	fine
00 42 W	+5° 31′	"	4.64	F7 V	8-8-8	"	"	SOME CLOUDS	40/96	fine
00 32 E	+50° 34′	"	3.95	B0p	8-8-8	"			40/70	fine

WAS NOT REMOVED FROM P.H.

Date Aug 7, 1968 **Observer** Ri-Ne **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
31341	HD156014	17 10.1	+14° 30	612	IIa-O	013	74°F	20:30	[88] 21:58	↑
31342	HD187691	19 46.2	+10 10	"	"	"		22:09	[115] 00:24	A
31342 T	Calibration Step Wedge for plates 31341-42									

Dome Temp.
Focus
Dome Temp.
Hour Angle End

Dome Temp. 60° F

Focus

Dome Temp. 54° F

Transparency Conditions good
clouds

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.		REMARKS	Quality
[illegible]	[illegible]	01 35W	+14° 30	3	4.41	M5 II	3-8-8	G12	Br. Std Velocity 2prs 40/135	fine
[illegible]	[illegible]	01 05W	+10° 19'		5.8	F8	3-15	6.12	Std. Vel. clouds 2prs 200/165	weak
									clouded out	

129

Visitors, 64 9:00
74 10:00
138 total

Showed α Her
Br, Bb, Hh.

Date ~~July~~ Aug 10/11, 1968 SAT/SUN Observer Gs - HK - Go Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
~~31343~~	~~HD 204867 (α Aqr)~~	21 26.3	-6 01	G12	IIao	013	65°F	10 59		A
587-1 to 24								2315	0350	
								2 CH:	4:35	
31343	φ PER	1 37.4	+50 11	G12	IIao	009		4 08	41 4 49	C

Dome Temp. 48°F

Focus ....

Dome Temp. 42°F

Transparency Conditions EXCELLENT

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.		REMARKS	Quality
		3-4"	3.73	G0Ib		·	→ PHOTOMETRY 40/5	
09 W	+50°32'	2-3"	3.95	B0p	8-8-8	G12	HK * 40/70	

Date Aug 11/12, 1969 SUN/MON **Observer** Ri-Ne **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P
31344	HD 161096	17 38.9	4° 37'	G-12	IIaO	032	62°F	20:32	42 21:14	C
31345	HD 172044	18 32.9	+33 23	G12	IIaO	013		21:23	71 22:34	A
31346	HD 186791	19 41.5	+10° 22	G12	IIaO	013	59°F	22:40	47 23:27	C
31347	HD 212883	22 22.4	+36 57	G12	IIaO	013	58°F	23:39	185 02:44	A
31348	HD 3712	00 34.8	+55 59	G12	IIaO			02:53	26 03:19	C
31349	Ø Per	01 37.4	+50° 11'	G12	IIaO	.009L		03:25	35 04:00	A
31350	HD 12929	02 01.5	+22 59	G12	IIaO	013	54°F	04:07	18 04.25	C
31350 ??	calibration wedge for plates 31343 - 31350									

Dome Temp. 43° F

Focus ....

Dome Temp. 42° F

Transparency Conditions VERY GOOD

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS		Quality
0 37W	4° 36′	2-3″	3.93	K2 III	8-8-8	G12 Br Std. Vel.	40/160	FINE
1H 04 W	+33° 28	3	5.4	B9	8-8-8	G12 B Type std Vel (Broken in the middle)	200/240	FINE
0H 43W	+10° 35		4.15	K3 III	8-8-8	G12 Bright Std Vel	40/160	FINE
1H 25W	+37° 20	3	6.3	B2	8-8-8	G12 B Type std Vel (Broken into 5 pieces)	200/240	OK *
0H 18 E	+56° 24		3.34	K0 II	8-8-8	G12 Bright std Vel	40/160	FINE
0H 35 E	+50° 32	3	3.95	B0p	8-8-8	G12 Hk*	40/70	FINE
0H 34 E	+23° 20		3.15	K2 III	8-8-8	G12 Bright Std Vel	40/160	

D. H. McNeil

DAWN

*/2 FOGGED PCS. DEV. SMITH 2136371 (Aug 15)

Date Aug 12-13 Mon Tues 1968 **Observer** Sc - Bü **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.	Hour Angle End
31351	α Her.	17h 10.1	+14° 30′	5-12	IIa-O	13.0	67°	20:53	21:47	A	1.4W
31352	9 Sge	19 47.9	+18° 25′	6-108	IIa-O	very long 13.0				A	
31353	9 Sge	19 47.9	+18° 25′	6-108	IIa-O	very long 13.0				C	

#31351 T1 calibration wedge for #31351

Dome Temp.
Focus
Dome Temp.

Dome Temp. 57 Spectrograph 67° **Transparency Conditions** Partly Cloudy

Focus

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	filter	REMARKS		Quality
1:45W	+14° 26'	3"-4"	4.41	MKII	8s-8s	12	Br. std. vel.	80/320	sl. weak
			~~6.2~~	~~08+~~	~~none~~	~~12~~	heavy clouds	~~800/40~~	
			~~6.2~~	~~08+~~	~~none~~	~~12~~	few holes	~~800/40~~	
			13 Aug/68			D-76	modif. 70°F		

135

Date 13-14 Aug/68 Tues-Wed **Observer** Hd - Mse - Gs **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I	Hour Angle End
~~31353~~	~~HD 171391~~	~~18 29.5~~	~~−11 03~~	~~G12~~	~~IIaO~~	~~013~~	~~71°F~~	~~20:01~~	~~—~~	A	
31352	HD 145001	16 02.5	+17 19	G12	IIaO	013 S	71° F	20 19	[155] 22 54	A	
31353	HD 204867 (β Aqr)	21 26.3	−6 01	"	"	013 L	"	23 04	[42] 23 46	[illegible]	
31354	HD 221253 (AR Cas)	23 28.7 (1970)	+58 23 (1970)	"	"	013		23 58	[55] 01 03	A	
31355	HD 206778 (ε Peg)	21 39.3	+9 25	"	"	"	68°F	01:21	[46] 02:07	[illegible]	
31356	[illegible]	01 33.4	50° 11′	"	"	.009 x L		02:18	[64] 03 22	[illegible]	
31357	HD [illegible] (ζ Psc)	23 36.5	+5 05	"	"	013	66°F	3:33	[54] 4:27	[illegible]	

Dome Temp. 62° F

Transparency Conditions HEAVY HAZE

Focus

Dome Temp. 54° F

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	FILTER	REMARKS		Quality
	-10 57'	1-2"	5.2	gG7		G12	TOO FAINT	200/480	→
4 00 W	+17 11	2-3"	6.1	G4	8-8-8	G12	Std Vel. slit ~ 2/3 normal	200/214	WEAK
0 30 E	-5 40	3"	3.73	G0Ib	8-8-8	"	BR. ST. VELOCITY	40/100	SL. WEAK
1 13 E	+58 23	1"	4.89	B3V	8-8-8	"	Ed Bin Std. [illegible] of 4.	200/240	FINE
W 1:38	+ 9° 46'	3"	3.98	K2Ib	8-8-8	"	BR. ST VELOCITY ([illegible])	40/160	FINE
01 06 E	50° 34'	1"	3.95	B0p	8-8-8	"	S.B.	40/80	(GUIDING) FINE
W 2:02	+5° 29'	4" → 7"	[illegible]	F7I	8-16	"	[illegible] POOR SKY & POOR SEEING	40/41	WEAK

Date 14-15 Aug /68 Wed-Thurs **Observer** Hb, Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
31358	HD 156014 (α Her)	17h 10m.1	+14° 30′	G12	IIaO	013	68°F	20:23 [91]	21 54	A
31359	HD 206778 (ε Peg)	21 39.3	+ 9 25′	G12	IIaO	013		22:00 [88]	23 23	C
31360	HD 221253 (AR Cas)	23 28.7	(1970) +58 23	"	"	"		23 30 [83]	00 53	A
31361	HD 3712 (α Cas)	00 34.8	55 59	G12	IIaO	13		00 58 [42]	01 40	C
31362	HD 222368	23 34.8	+5 05′	"	"			01 54 [97]	03:31	A
31363	φ Persei	01 37.4	+50 11	G12	IIaO	009xL		03 36 [49]	04 25	C

31363 71 calibration wedge for plates 31352 - 31363

Hour Angle End
0:57W
0:22E
0:25E
0:41E
[illegible]
0:00W

Dome Temp.
Focus
Dome Temp.

Dome Temp. 54°F
Focus ....
Dome Temp. ....

Transparency Conditions fair — Ci + Ac in south
poor after 2200

Ending Time E.S.T.	P.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp. 8 · 8 · 8		REMARKS		Quality
[illegible]	[illegible]	0158W	+14° 28′	2~3″	4.4	M5 II	8-8-8	Ca12	Std. Vel.	200/800	FINE
[illegible]	[illegible]	0102 E	+ 9° 46′	1-2″	3.98	K2 Ib	8-8-8	Ca12	" 2210: Clouds	200/720	FINE
[illegible]	[illegible]	0120E	+58° 22′	~3″	4.89	B3V	8-8-8	"	Ecl. Binary (Hd) Clouds	~~200~~/240	FINE
[illegible]	[illegible]	0142E	+56° 22	~2-3″	3.34	K0 II	8-8-8	"	Std Vel. 3 pieces	200/720	FINE
[illegible]	[illegible]	0115 W	+5 29	3+″	4.64	F7V	8-8-8	"	" "	200/480	FINE
[illegible]	[illegible]	0001W	+50 33	~2″	3.95	B0p	8-8-8	"	Special Binary (Hk)	40/80	FINE

15 Aug/68 : 68.0°F, 0.76 [illegible]

Date Aug. 15-16, 1968 / Thurs-Fri **Observer** Hk-Rs Go **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.E	Hour Angle
31364	AR Cas HD 221253	23h 28.7m	+58° 23′	6-12	IIaO	13L	65°F	20:48 (45)	21:33	A	[illegible]
588-15 3								2200	2250		
31364 T,	calibration wedge for #31364										

Dome Temp. 51°F

Focus

Dome Temp.

Transparency Conditions VERY GOOD

Ending Time E.S.T.	P.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2:3[illegible]	A	4:35E	+58°23′	1-2″	4.89	B3V	8-8-8	Ecl. Binary ([illegible]) POSSIBLE FOGGED WHEN P.H. REMOVED 200/240	FINE
2:50								Suddenly clouded in!! Dec slipping in W [illegible]	E+20′

D-76 modif. / 68.2°F // 1968 [illegible] 16 / 290 [illegible] / 5/17

141 Visitors : 76 + 81 ; M13 - exceptionally good! Go, Pl, Ch

Date Aug 17-18 1968 SAT/SUN **Observer** Go - ~~Dg~~ Dg - Gs **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
589-1 to 25								2215	0420	

Dome Temp.
Focus
Dome Temp.
Hour Angle End

Dome Temp. 52°F

Focus ....

Dome Temp. ....

Transparency Conditions Good

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Filter	REMARKS	Quality
							~~Dr not here~~. Telescope slipping S in [illegible]	
							Removed 1 small weight. (GO)	

Date Aug. 18-19, 1968 / SUN-MON. **Observer** HK-Ne / Ri Ea **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
31365	α Boo HD 124897	14h 11.1m	+19° 42'	6-12	IIa O	013	62°F	20:15	20:22	A	3 [illegible]
31366	HD 146051	16h 09.1m	-3° 26'	"	"	"	"	20:42	21:47	C	3 [illegible] W
31367	Chi Cyg	19h 49.4m (1970)	+32° 50'	"	"	SHORT 016		22:18	00:20	A	[illegible] W
31367 T1	calibration wedge for plates 31365-31367										

Aluminizing Aug 20-23 (Cass. secondary, 3rd mirror, spectrograph mirrors)
lost 1 good night (Aug 20)

Dome Temp. 48 °F

Focus ....

Dome Temp. ....

Transparency Conditions OCCASIONAL THIN CLOUDS

Ending Time E.S.T.	P.E.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Filter	REMARKS		Quality
20:22	A	3 41 W	+ 19 23	2-3	1.29	A2 III	12-12		Br. Std Vel. ✶	20/80	[illegible]
21:47	C	3:07 W	−3°36′	"	4.30	M1 III	8-8-8		" " "	200/800	[illegible]
00:20	A	2h05 W	+32°52′	4-5	~7	M	8-8-8		Mira Var. for Gn clouded in 00:15	200/~~300~~ 155	WEAK
									clouded in		

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Date Aug 23/68 Observer [illegible] Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.F.
31367 F1	focus test		in in/out[illegible]	6-12	II a0	9	64° F			C
F2	"		"	"						C
F3	"		"	"			"			C

G108 - Focus 8.30 - J.L.S.

Dome Temp. ....

Focus ....

Dome Temp. ....

Transparency Conditions ....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Filter	REMARKS	Quality
					5/5	NONE		c to red
					5/5	"	changed focus from 30-R to 0-R (ccw as seen from above knob)	
								c to red (bottom)
					5/5	"	changed from 100-R to 70-R (knob ccw)	GOOD

Dome Temp.
Focus
Dome Temp.

Date 26-27 Aug 1968 **Observer** Sc-Bü/mse-HK **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
31368	HD 187691	19h 46.2	+10 10	G-12	IIa-O	12.0		21:45 (59)	22:44	C	1:00W
31369	HD 212943	22 25.9	+04° 12	G-12	IIa-O	12.0		22:55 (65)	0:00	A	E0:20
				CLOUDS							
31370	HD 221253 AR CASS	23:24.8	+58° 0'	G 12	IIaO	12 XL	56°F	1:25 (16)	1:41	C	W0:18
31371	HD 209813	1:24.9	+5° 38'	G 12	IIaO	12		1:52 (51)	2:43	C	0:4[illegible]
31372	φ Per	1:37.4	+50° 11'	G 12	IIaO	9	55°F	3:06 (8)	3:14	A	E0:22
31373	"	"	"	"	"	9		3:16 (15)	3:26	C	E0:10
31374	HD 26162	4:03.3	+19° 21'	"	"	12		3:35 (72)	4:47	C	E1:15
							54°F				

31369 T1 calibration wedge for plates 31368, 31369

31374 T1 calibration wedge for plates 31370 - 31374

Dome Temp. 45°F

Focus ....

Dome Temp. 40 °F

Transparency Conditions partly cloudy i: POOR

Ending Time E.S.T.	P.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.		REMARKS	Gain / Counts	Quality
[illegible]	C	1:00 W	+40° 23'	5"–8	5.8	F8	8-8-8	G12	Exposure meter acting very odd. Hi-Voltage Problems etc. 20h - 21:30	100/220	STRONG
0:50	H	E0:20	+04° 36'	5"	5.9	K0	8-8-	G12	Not std vel. (152 counts at 23:32) #400	100/161	FINE
									clouds moving in. #31369: 2 PCS.	200/	
[illegible]	C	W0:18	58° 24'	4"	4.69	B3V	8-8	G12	Ecl. bin.	200/200	(GUIDING) SL STRONG
2:43	C	0:40 E	+6° 01'		6.2	K4	8-8-8	G12	std. vel.	200/320	STRONG
3:14	A	E0:22	50° 33'	3"	3.95	B0p	8-8-8	G12	spect. Bin (HK) (MAG 3 STRONG)	40/60	VERY STRONG
3:26	C	E0:10	"	"	"	B0p	8-8-8	G12	"	40/30	(GUIDING) STRONG
[illegible]:47	C	E1:15	+19° 33'	4"→2"	6.4	K1	8-8-8	G12	std. vel. MORE CLOUDS	200/219½	(GUIDING) FINE-ST

DAWN

Exp. 30x = 3

D-76 ... 69°F ... [illegible]

Date Aug 27/28, 1968 Tue/Wed **Observer** GC, rG Hd / L, GS **Julian Day** ....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
590-1142								2000	0430	

Dome Temp.
Focus
Dome Temp.
Hour Angle End

Dome Temp. 47°F

Focus

Dome Temp. 40°

Transparency Conditions EXCELLENT

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Filter	REMARKS	Quality
							FIXED 4" retractor x-hair light (Go)	

Date ~~Aug~~ 28/29 1968 Wed Th **Observer** GO / Ri / Dy / Msc **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I
591-1 to 40	⊙							2000 (8:30)	04:30	
31375	φ Per	1:37.4	+50° 11'	6.12	IIaO	9	56°F	0444	(2) 0446	c

Dome Temp.

Focus

Dome Temp.

Hour Angle End

Dome Temp. 50°F

Focus

Dome Temp. 42°F

Transparency Conditions Good

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	FILTER	REMARKS	Quality
01h 17 W	+50 32	~2"	3.95	30p	24s		S. B. Exp. 30x #2 40/20	FINE

FLASHLIGHT NEEDS BATTERY — FIXED Ea

Date Aug 29/30 1968 Thurs/Fri **Observer** HB GO/R. JB **Julian Day** ....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
31376	HD 139892	15h 35m.6	+36° 58′	G12	IIaO	9	63°F	19 49	19 58	A
31377	HD 161701	17 41.9	−14 42	"	"			20 06	21 04	C
31378	HD 171391	18 29.5	−11 03	"	"	13		21 10	21 43	A
									1130	
592-1 to 4								2200	2330	
31379	HD 221253 AR Cas	23 24.8	+58 00	G12	IIaO	12×L		23 50	00 02	C
31380	HD 212943	22 22.8	+04 12	G12	IIaO	13		00.14	00 38	A
31381	HD 222368	23 34.8	+5°05	G12	IIaO	13		00.50	00 59	C
31382	HD 223311	23 43.4	−06 56	G12	IIaO	13		01:10	02.20	A
31383	HD 12929 α Ari	02 01.5	+22° 59	G12	IIaO	13		02:30	02:39	C
31384	φ Per	01 37.4	+50°11	G12	IIaO	13		02:50	02:55	A
31385	HD 18884 α Cet	02 57.1	+3°42	G12	IIaO	13		03:10	03:17	C
31386	HD 22484	03 31.8	+00 05	G12	IIaO	13		03:26	03:55	A
31387	29 Persei HD 20365	03 18.5	+49 51	G12	IIaO	13		04:07	04:16	C
31388	φ Per	01 37.4	+50°11	G12	IIaO	9		04.23	04:30	A
31389	19 Tauri HD 23338	03 39.3	+24 16	G12	IIaO	13		04.35	04.44	C

Dome Temp. 53°F

Focus

Dome Temp.

Transparency Conditions Fair – good
Clouds after 2330

Ending Time E.S.T.	Pl.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Filter	REMARKS		Quality
12	A	02 35 W	+36° 46	~2"	5.1	B8n	5-5-5	G12	Special SB (BGrEA)	40/20	FINE
04	C	01 34 W	−14°40	3-5"	6.0	B9I	5-5-5	"	B8-9 SB (Hulse)	40/20	FINE
43	L	01 25 W	−10° 58'	~3"	5.2	gG7	5-5-5	G12	Std. Vel. Plate broken (2 pieces)	40/30	SL. WK
									Clouds!!		
	C	1h 10 E	+58° 23'	~2"	4.89	B3V	5-5-5	G12	Hd Eclipsing Bin	40/40	STRONG
33		0h 32 W	+04° 35'	~2	5.9	KO	5-5-5	G12	Std Vel	40/40	FINE
59		0h 23 E	+05° 31	~3	4.64	F IV	5-5-5	G12	Bright Std Vel	40/30	FINE
		0h 50 W	−06° 30	2-4	6.3	gK4	5-10	G12	(2 pieces) Std Vel – exposure meter troubles clouds out	40/149	WEAK
39		1h 10 E	+23° 20	~3	3.15	K2III	5-5-5	G12	Bright Std Vel clouds	40/40	FINE
55	A	0h 30 E	+50 33	~3	3.95	Bop	5-5-5	G12	plate several pieces Hh * "	40/20	FINE
17		1h 27 E	+64° 00	~3	4.16	M2III	5-5-5	G12	Bright Std Vel "	40/40	FINE
55		1h 22 E	+00 22	~3	5.2	F9	5-5-5	G12	Std Vel "	40/30	FINE
10		0h 44 E	+50°07	~3	5.1	B3	5-5-5	G12	B-type Std Vel	40/20	FINE
30	A	1 40 5 W	+50°33	~3	3.95	Bop	5-5-5	G12	HK * field drawn	40/20	FINE
44		0h 43 E	+24 25	~3	4.3	B7	5-5-5	G12	B-type Std Vel	40/20	FINE

EXPOSED ... #3

Date Fri. - Aug 30/31/68 **Observer** L-Se/Hk-Bü **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
31390	HD161701	$17^h 41^m.9$	$-14° 42'$	G12	IIaOb	9		19:58	(39) 20:37	A
31391	χ Cyg	$19^h 49.3$ 1970	$+32° 50'$	"	"	"		20:52	21:40	C
31392	Nova Del	20 37.7	+18 55	"	"	"		21:52	(73) 23:05	A
31393	HD209813	22 01.0	$+46° 45'$	"	"	"		23:16	(121) 01:17	C
31394	HD221253 (AR Cas)	23 24.8	$+58° 0'$	"	"	9 LONG	60°F	01:36	01:45	A
31395	β Ari	$01^h 49^m$	$+20° 19'$	"	IIaO	9 LONG	"	01:54	01:59	C
~~31396~~	~~φ Per~~	~~$01^h 37^m.4$~~	~~$+50° 11'$~~	~~"~~	~~"~~	~~9 REG.~~	~~"~~	~~02:13~~	~~02:17~~	~~A~~
31397	HD 221253 (AR Cas)	$23^h 24^m.8$	$+58° 00'$	"	"	9 LONG	"	02:29	02:36	C
31398	φ Per	$01^h 37^m.4$	$+50° 11'$	"	"	9 REG.	"	02:45	02:48	A
31399	Mira Ceti	$02^h 17^m.8$ 1970	$-3° 07'$	"	"	9 LONG	"	03:05	03:19	C
31400	BF Aur	$04^h 58^m.0$	$+41° 09'$	"	"	13	"	03:51	(72) 05:03	A

Dome Temp. 53°F

Focus

Dome Temp. 46°F

Transparency Conditions very good

This plate may be fogged differently with [illegible]

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Filter	REMARKS		Quality
[illegible]	[illegible]	1:10W	−14° 40′	2-3"	6.0	B9I	5-5-5	G-12	Bnt. Spectro. Binary?	40/20	(FOG) FINE
[illegible]	C	0:10W	+32° 52′	2-3	~7	M5e	5-5-5	G-12	L.P.V.	40/36	(FOG) FINE
[illegible]	A	0.43W	+19° 05′	2-3	8?	Nova	5-5-5	G-12	Nova - plate broken - end off only one piece in box	40/24	(FOG) STRONG
[illegible]	C	1:34W	+47° 06′	"	7.5	KO	5-5-5	G-12		40/36	(FOG) FINE
[illegible]	A	0:36W	+58° 23′	"	4.89	B3V	5-5-5	G-12	Hd Ecl. Bin. plate broken. 2 pieces put in box. Rest too small.	40/23	(FOG, GUIDING) STRONG
[illegible]	C	1:34E	+20° 41′	"	2.7	A5	5-5-5	G-12	" " "	40/20	([illegible]) SL. STRONG
~~[illegible]~~	~~A~~	~~1:05E~~	~~+50° 33′~~	~~"~~	~~3.95~~	~~BOp~~	~~5-5-5~~	G12	Hk * plate broken - 2 pieces put in box. Rest too small.	40/20	*
[illegible]	C	1:28W	+58° 23′	"	4.89	B3V	5-5-5	G-12	Hd Ecl. Bin.	40/20	(GUIDING) STRONG
[illegible]	A	0:34E	+50° 33′	"	3.95	BOp	5-5-5	G-12	HK *	40/20	(GUIDING) STRONG
[illegible]	C	0:38E	−3° 05′	"	~6	M6e	5-5-5	G-12	Gn Mira Var.	40/36	NO COMP. SL. WEAK
[illegible]	A	1:39E	+41° 17′	"	~8.5	B5V	5-10	G-12	Hd Ecl. Bin. [illegible] " " SEE FINDER FIELD	400/100	SL. WEAK

* PLATE STUCK IN EXP BOX - DID NOT GET DEVELOPED.

Date Aug 31 - Sept 1, 1968 (SAT / SUN) **Observer** GS - Ale **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
31401	NOVA DEL	20 37.7	+18 55	G12	IIa-O	13	65°F	22 50	00 54	A
31402	HD 209813	22 01.0	+46 45	"	"	"	"	1 15	2 30	C
31403	HD 221253 (AR Cas)	23 2[illegible].8	+58 0	"	"	9 Y.L.	60°F	2 45	2 52	A
31404	φ PER	1 37.4	+50 11	"	"	9 Y.E.L.	"	3 03	3 13	C
31405	HD 12929 (α [illegible])	02 [illegible]	+22 59	"	"	9 X.E.L.	"	3 23	3 28	A
31406	HD 18884 (α Cet)	02 57.1	+3 42	"	"	9	"	3 37	3 44	C
31407	HD 20902 (α Per)	03 17.2	+49 30	"	"	"	"	3 54	3 56	A
31408	HD 29139 (α Tau)	04 30.2	+16 18	"	"	"	"	4 08	4 10	C
31409	HD 18884 (α Cet)	02 57.1	+3 42	"	"	"	"	4 20	4 29	A
31410	HD 36673 (α Lep)	05 28.3	-17 54	"	"	"	"	4 39	4 59	C
~~31411~~	~~HD 62509 (β Gem)~~	~~07 39.2~~	~~+28 16~~	"	"	"	"			~~A~~

Dome Temp. 50°F

Focus

Dome Temp. 46°F

Transparency Conditions HAZY

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	FILTER	REMARKS		Quality
[illegible]	[illegible]	2 36 W	+19 05	2-3"	5?	NOVA	5-5-5	G-G.	NOVA DEL [illegible]	400/240	OK
[illegible]	[illegible]	2 50 W	+47 06	"	7.5	K0	5-10	"	HEAVY HAZE	400/120	WEAK
[illegible]	[illegible]	1 [illegible] W	+58 24	"	4.09	B3 V	5-5-5	"	40' Eclipsing Binary (Broken)	40/80	(GUIDING) FINE
[illegible]	[illegible]	0 04 E	+50 33	"	3.95	B0p	5-5-5	"	[illegible] STAR — CLOUDS	40/80	(GUIDING) FINE
[illegible]	[illegible]	0 13 E	+[illegible] 30	"	3.15	[illegible]	5-5-5	"	[illegible] STAR — CLOUDS	40/40	FINE
[illegible]	[illegible]	0 52 E	+4 00	"	4.16	M2 III	5-5-5	"	" — BROKEN : 2 PCS	40/36	FINE
[illegible]	[illegible]	1 02 E	+49 46	"	2.27	F5 Ib	8-7	"	" —	40/24	(GUIDING) FINE
[illegible]	[illegible]	1 59 E	+16 28	"	2.39	K5 III	8-7	"	" —	40/36	SL. STRONG
[illegible]	[illegible]	0 07 E	+4 00	"	4.16	M2 III	5-5-5	"	" — BROKEN	40/36	FINE
[illegible]	[illegible]	2 07 E	-17 47	"	2.81	F0 Ib	8-7	"	" — CLOUDS	40/24	FINE
				"	~~2.15~~	~~K0 III~~		"	" —	~~40/36~~	

Date 2-3 Sept, 1968 Mon-Tues **Observer** Sc-Ne / HK **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
31411	η Cyg	19 52.5	+34 49	G-108	IIa-O	10.0 wide		21:55		B	
12	"					15.0				C	
13	"					20.0				A	
14	"					25.0				B	
15	"					30.0			22:13	C	
31416	Φ Per	1h37.4m	+50°11′	G-12	IIa-O	9 LONG	58°F	4:06	(8) 4:14	A	1h05m W
31417	"	"	"	"	"	9 REG	"	4:23	(18) 4:41	A	1h32m W
31418	AR Cas HD 221253	23h24.8m	+58°00′	"	"	9 LONG	"	5:05	(14) 5:19	A	[illegible]

31389 T1	calibration wedge for plates 31375 – 31389
31418 T1	" " " " 31390 – 31418
31418 T2	" " "

Dome Temp. 47°F

Transparency Conditions partly cloudy

Focus

Dome Temp.

Ending Time E.S.T.	P.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Filter	REMARKS	Quality
	[illegible]		+35° 01′		5.0	K0 III	none	G-12	test exposures for 80/8	[illegible] strong
	C								slit width for G108 80/8	
	A								plate box #2 80/8	
	[illegible]								"	
[illegible]	C								heavy clouds - closed up "	
									04:00 - OCCASIONAL CLEARING	
4:14	[illegible]	1h 05m W	+50°32′	~5″	3.95	B0p	5-5-5	G-12	Hk * 40/21	(G[illegible]) FINE
4:41	A	1h 32m W	"	"	"	"	5-5-5	"	" " clouds BROKEN: 3 [illegible] 40/21	(GUIDING) SC STRONG
5:19	A	4h 21m W	+58° 23′	"	4.89	B3 V	8-7	"	Hd Ecl. Bin. " " " QUITE LIGHT AT END 40/28	SC. STRONG

INTEGRATOR SLOWLY DECREASING WHEN BALANCE ALL THE WAY CCW

CENTERED SLOW MOTION DEC

RA TV PICTURE SCREWED UP

D-76 modif. / 68.0°F / 30 [illegible] / 68

MWP-2 / 68°F / 6 min 3 [illegible] / 68

MWP-2 (original) 6

Date 3/4 Sept [illegible]/Wed. 1968 **Observer** [illegible], Hb / Hk, Jf **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
31419	HD 161701	17h 41.9m	−14° 42′	G12	IIaO	13		19 36	19 58	A
31420	Nova Del	20 37.7	+18 55′	G12	IIaO	13	65	20 11	21 33	C
31421	HD 186791	19 41.5	+10 22	"	"	"		21 45	21 48	A
31422	"	"	"	"	"	9	65	21 51	21 58	C
31423	HD 206778	21 39.3	+9 25	"	"	"	65?	22 05	22 11	A
31424	HD 209813	22 01.0	+46 45	"	"	13		22 18	23 31	C
31425	AR Cas	23 24.8	+58 00	"	"	9 –		23 58	00:07	A
31426	HD 4128 (β Cet)	00h 38.6m	−18° 32′	"	"	13		00:35	00:40	C
31427	φ Per	01h 37.4m	+50° 11′	"	"	9	64°F	01:06	01:11	A
31428	"	"	"	"	"	"	"	01:15	01:19	C
31429	HD 29587	04h 34.5m	+41° 57′	"	"	13		02:12	03:25	C

31429 T1 calibration for plates 31419 – 31429

Dome Temp. 54°F

Transparency Conditions poor

Focus

Exp. Meter — Gain setting 2.00 unstable

Dome Temp. 48°F

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp. 5-5-5	Filter	Remarks		Quality
[illegible]	A	00 47W	-14°40′	1-2″	6.0	B9I	5-5-5	G12	B-type SB (Huba) (BROKEN)	40/20	SL. STRONG
[illegible]	C	00ʰ 30ᵐE	+19°05′	1-2″	~8	Post Nova	5-5-5	"	Broken: 1 large, 1 small piece	400/242	SL. STRONG
[illegible]	A	0039 W	+10°35′	1-2″	4.15	K3II	5-10	"	Std. Vel.	40/36	SL. STRONG
[illegible]	C	0049W	"	"	"	"	5-5-5		"	40/36	SL. STRONG
[illegible]	A	00 56E	+9 46		3.98	K2Ib	5-10		[illegible]	40/36	STRONG
[illegible]	C	0003W	+47°06′	~2″	7.5	K0	5-5-5			400/300	FINE
[illegible]	A	0:46W	+58 23	"	4.89	B3V	5-5-5	"	Hd Eclipsing Binary BROKEN: 1 LARGE PIECE 1 SMALL "	40/18	SL. STRONG
[illegible]	C	1:26 E	-18°10′	"	3.06	K1III	5-5-5	"	Br. Std. Vel.	40/36	SL. STRONG (around)
[illegible]	A	2:00 E	+50°32′	"	3.95	B0p	5-5-5	"	HR * BROKEN: 1 LARGE PIECE	40/21	SL. STRONG (around)
[illegible]	C	1:47 E	"	"	"	"	5-5-5	"	"	40/21	SL. STRONG
[illegible]	C	2:38 E	+42°06′	~4″	7.7	G2	5-5-5	"	Std. Vel. (clouds)	400/100	BLANK

03:30 - clouded [illegible]

mwA-2/68.0°F/2.0 min " Sulfur

→ PLEASE NOTE REVISIONS TO ←
EXP. MTR TABLE

SEPT 4 Ex. Mtr. Repaired

Date Wed. Thurs Sept 4/5/68 **Observer** Hr / Mise - Ea **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.	Hour Angle End
31430	Nova Del	20^h 37.7	+13° 48′	G 12	IIa-O	13		2012 (C)	2118	A	0: E
31431	HD 209813	22^h 01.0	+46 45	"	"	"		2135	2240	C	E:
31432	SZ Psc	23^h 08.3	+02 38	"	"	13 SHORT		2305 (213)	2:43	A	W2:
31437 T1	calibration step wedge for plates 31430, 31431										
31433	φ PERS	01:37.4	+50° 11′	G 12	IaO	9	62°F	3:00 (6)	3:06	A	W0:04
31434	HD 221253 AR CASS	23:24.8	58° 0′	G 12	IIaO	9		3:14 (18)	3:32	A	W2:13
31434 T1	calibration wedge for plates 31432 - 31434										

Dome Temp. 22h00 +50°F

PH-2 Repaired
Screws in base protruding
causing breakage

Focus ...

Dome Temp. ...

Transparency Conditions FAIR ⟶ POOR
2030 Thin cloud
2200 Clear

Ending Time E.S.T.	P.E.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp. (G 12 filter)	REMARKS	Gain / Counts	Quality
2110	A	00 44 E	+19 05	2	8?		5-5-5	NOVA	400 / 240	FINE
22[illegible]	C	E0: 45 (?)	+47 06	2-3	7.5	K0	5-5-5		200 / 130	FINE
2143		W 2:11	+2° 34′		8.5–9.5	K1 III	5-5-5	Hd Ecl Bin.	400 / 305	SL. WEAK
			mwp-2 / 69.0°F // 5/9/68							
1:1[illegible]	A	W 0:04	50° 33′		3.45	B2p	15	Spect. Bin	40 / 18	(POOR GUIDING) FINE
1:32	A	W 2:43	58° 24′		4.84	B3 V	5-5-5	Hd Ecl. Bin	200 / 80	(GUIDING) FINE

CLOUDS FROM S.W.

mwp-2 / 69.0°F // 6 Sept 68

Date Fri Sat. 6/7 Sept 1968 **Observer** Dyrdt/Sr, Hb **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
31425	HD 161701	17h 41.9	-14° 42'	G-12	IIa-O	13	66°F	20h00	(18) 20h 18	C
~~31435~~	~~Nova Del~~	~~20h 37.7~~	~~+17° 55~~	~~G-12~~	~~IIa-O~~	~~13~~	~~66°F~~			A
31436	χ Z Cap	22h 29.5	+66° 38'	G-12	IIa-O	13r 2/3 long	62°F	0:26	(65) 2:36	A
31437	AR Cas	23 24.8	+58 00	G12	IIaO	9		02 48	(6) 02 54	C
31438	φ Per	01 37.4	+50 11	G12	IIaO	9		03 02	(4) 03 06	A
31439	β Ari	01 49	+20 19	G12	IIaO	9xL		03 15	(2) 03 17	C
31440	χ Per HD 24534	3h 49.1	+30 45'	G-12	IIa-O	13xL		03 58	(33) 04 31	A
31441	"	"	"	"	"	"		04 33	(29) 05 02	C

Dome Temp. 53°F at 1930 44°F at 0040

Transparency Conditions poor → cloudy
Almost photoelectric after 0000 (some haze)

Focus ....

Dome Temp. ....

Ending Time E.S.T.	P.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		01h 15 W	−14° 40′	~4″	6.0	B9 I	5-5	cloud covers 20h 15 set. 200/4 counts. Clouds	ALMOST BLANK
								PLATE HOLDER A loaded, in N. Pier.	
							Red	PLATE/CELL Cap - LIGHT will not go off	
								even when cell is capped & plate is capped	
					8?		5-	HEAVY CLOUDS, spotty open patches. No counts.	
					stopped:			Clouds & rain.	
		~2h 45m W	+67° 00′	~3-4″	8.4/9.0	09.5	5½-5-5	E.l. Binary FIELD O.K. 400/120 58	VERY WEAK
		02 13 W	+58 22		4.89	B3 V	5-5 5	" 40/15	FINE
		00 12 W	+50 32		3.95	B0p	5-5-5	Spect. Binary 40/18	FINE (GUIDING)
		00 13 W	+20° 41′		2.7	A5	5-5-5	Ecl. Binary 20/11	FINE
	A	00 31 E	+30 58	poor 5+	6.4	Ope	5-5-5	Polaroid filter (θ) (Sc) 200/40	WEAK
		00 03 E	"	"	"	"	5-5-5	" (θ+90°) 200/40	WEAK & CENTRE TO [illegible]

Go Dy Pl — 16 ... E Lyr

Date Sept. 7/8, 1968 Sat./Sun. **Observer** Go-Gs-HK **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
543-1 to A								2255	(1:05) 0h 0m		
31442	HD 221253 (AR Cas)	23 24.8	+58 :0	G12	IIa-O	9	58°F	00 28	00 36	C	[illegible]
31443	φ PER	1 37.4	+50 11	"	"	"	"	00 57	00 59	B	[illegible]
31444	NOVA DEL	20 37.7	+17 55	"	"	13	"	01 21	02 11	C	[illegible]
31445	HD 209813	22 01.0	+46 45	"	"	"	"	02 29	03 38	A	[illegible]
31446	BF Aur	4 57.0	+41 09	"	"	"	56°F	03 55	05 17	C	[illegible]

Dome Temp.
Focus
Dome Temp.

Dome Temp. 46°F

Transparency Conditions GOOD

Focus

Dome Temp. 40°F

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	FILTER	REMARKS		Quality
00 00	+58 23	2"	4.89	B3V	5-5-5	G12	Hα ECLIPSING BIN (CLOUDS)	40/15	(GUIDING) FINE
01 51E	+50 31	"	3.95	B0p	5-5-5	"	HK *	40/18	(GUIDING) FINE
04 23W	+19 05	"	?	?	5-5-5	"	NOVA DEL.	300/240	FINE
04 27W	+47 06	"	7.5	KO	5-5-5	"		400/300	FINE
01 53E	+41 15	"	8.5	B5V	5-10	"	Hα ECLIPSING BIN (CLOUDS)	400/166	VERY WEAK

Date Sept 8/9 Sun/Mon 1968 **Observer** Hb/Hr **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
31447	HD 161701	17h 41m.9	-14° 42′	G12	IIaO	13	61°F	19 27	(20) 19 47	c
31448	Nova Del	20 37.7	+18 50′	"	"	"		19 55	(72) 21 07	A
31449	XZ Cep	22 29.3	+66 38	G12	IIaO	13×⅔L	60°F	21 18	(126) 23 26	c
31450	AR Cas	23 24.8	+58 00	"	"	9 L		23 35	(7) 23 42	A
31451	SZ Psc	23 08.3	+02 08	"	"	12		23 56	(66) 02 44	c
31452	HD 26162	04 03.5	+19 21	"	"	"		03 41	(34) 04 15	A

31452 T1 calibration step wedge for plates 31435 - 31438, 31442 - 31446,

T2 " " " " " 31439 - 31441, 31447 - 31450

Dome Temp. 48°F

Focus

Dome Temp.

Transparency Conditions fair and improving
2200 very hazy

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Filter?	REMARKS		Quality
00 55′W	−14°41′	2-3″	6.0	B9I	5′-5′-5′	GG12	B8-9 SB	40 / 18	SL. WEAK
00 39E	+19°05′	~2-3″	(~8)	/	5′-5′-5′	"	$m_V \cong 6.5 (<7)$ clouds	400 / 240	FINE
00 10E	+67 01	~2-3″	8.4	B9.5	5′-5′-5	"	Hd Eclipsing Binary FIELD OK	450 / 120	WEAK (GUIDING)
00 52E	+58 22	2″	4.89	B3 V	5′-10	"	" " " broken :4 pcs.	40 / 15′	FINE
02 28 W	+02 32	5	8.5′	K1III	5′-5-5	"	" " " (BROKEN)	400 / 325	SL. WEAK
00 56 E	+19 33		6.4	K1	5-5-5		5-10 Vel[illegible]	35 / [illegible]	SL. WEAK

31451, 31452 nWP-2 / 9548 // 68.0°F / 7.0 min

Date Sept 11-12 / 1968 / Wed-Thurs **Observer** / [illegible] **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
31453	Nova Del.	20:37.7	+18° 48′	G.12	II a-O	14	58°F	0:31	(94) 2:55	C	[illegible]
31454	AR CASS	23:25.4	58° 00′	G.12	I a-O	9 XL		2:23	(12) 02:35	A	[illegible]
31455	ρ PERS	01.37.4	50° 11′	G.12	II a-O	9		2:45	(7) 2:52	C	[illegible]
31456	? ARI	1:49.4	+20° 19′	G.12	I a-O	13 XXL		3:01	(14) 3:[illegible]	A	[illegible]
										~~C~~	
31457	(14286) MIRA CETI	2:17:50	(1970) −3° 6′ 39″	G.12	I a-O	9		3:18	(57) 4:15	C	[illegible]
										~~A~~	
31458	HD 35410	5:19.4	−0° 59′	G.12	II a-O	9	54°F	4:24	(54) ~~5:[illegible]~~ 5:18	A	[illegible]

Dome Temp. 46°F

Focus

Dome Temp. 40°F

Transparency Conditions FAIR

Ending Time E.S.T.	P.E.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Filter	REMARKS		Quality
[illegible]	C	W4:31	+19° 06'	> 8" VARIABLE	?	Nova	5-5-5'	a-12	BROKEN : 2 PCS.	400/120	SL. WEAK
[illegible]	A	W2:14	58° 24'	~4"	4.89	B3J	25		Ed. Bin	40/20	SL. STRONG
[illegible]	C	W0:17	50° 33'		3.95	B3p	25		Spect. Bin [illegible]	40/[illegible]	FINE
[illegible]		W0:19	20° 40'	3"	2.7	A5	20		Ed. Bin	40/22	NO COMPARISON (GUIDING) SL STRONG
	C										
[illegible]		W1:04	-[illegible]° 06'	~3"-[illegible]	7.6	M6e	8-8-8		[illegible] SLIT TOO LONG	40/30	FINE
	A										
[illegible]		E0:58	-0° 54'	4"	5.9	K0	8-8-8		Std Vel.	400/126	SL. WEAK

([illegible] 3)

Dome Temp.
Focus
Dome Temp.

Date Sept 12-13 Thur - Fri **Observer** Sc - Rs Hr **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
31459	β Cyr	18h 46.4	+3: 15	G108	IIa-O	20.0 wgh	60°F	20:01 (1)	20:02	A	00h 13m
60	"	"	"	"	"	"	"	20:03	20:03	B	00 22
61	9 Sgc HD188001 Tr	19h 47.9	+18 25	G108	"	"		20:18 (3)	20:21	A	[illegible]
62	"	"	"	"	"	"		20:24 (2)	20:26	B	[illegible]
31463	Nova Del.	20 37.7	+18 55'	G-12	IIa-O	9.0		20:44 (64)	21:48	A	
31464	HD209813	22h 01.0	+46° 45'	"	"	11.0		21:40 (64)	00 47	A	
31465	SZ Psc HD219113 Tr	23 08.3	+0208	"	"	13 SHARP		01 60 (70)	0355	C	
31466	φ Per	01 37.4	+5011	"	"	9 NORM.		0409 (3)	0412	A	
31467	HD 25122	0403.3	+1921	"	"	"		0430 (26)	0458	C	

31467 T1 calibration step wedge for plates 31453 - 31467

Dome Temp. 49° F 03^h15 [illegible]

Focus ....

Dome Temp. ....

Transparency Conditions Clouds occasionally [illegible]

AFTER [illegible] [illegible]

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Filter	REMARKS		Quality
00h 23m	+33° 21'	2-5"	7.4	Bpe	none	G-12	[illegible] position 1	[illegible]	FINE
00 22	"	"	"	"	"	"	" " 2	"	
23h 37m [0 23E]	+18° 38'	"	6.2	Od	"	"	" position 1	80/13	
23h 43m [0 07E]	"	"	"	"	"	"	" " 2 ([illegible])	"	
0:17W	+1?° 06'	"	6.5?	[illegible]	5-5-5	G-12		40/24	FINE
							([illegible])		
	+17° 06'	"	7.5	KO	5-5-5	G-12		[illegible] 30	SL. WEAK
0330W	+[illegible]	"	3.5- [illegible]	[illegible]	5-5-5	[illegible] Sel. Bin		400/23[illegible]	SL WEAK
0142W		2-3	385	Bop	15			40/18	FINE
0002W	+1933	2	6.4	K1	5-5-5	STD VEL BROKEN ([illegible])		40/30	FINE

RASC ~150 E Lyr. Go, Ny

Date Sept. 13/14, 1968 – Fri/Sat. **Observer** 16-Dy-6o / Hk **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
594-1 to 24								2210 (5:30)	0340	
31468	φ Per	$1^h 37^m.4$	$+50°11'$	G-12	IIa-0	9	57°F	4:11 (4)	4:15	A
31469	AR Cas	$23^h 25^m.4$	$+58°0'$	"	"	"	"	4:32 (9)	4:41	C
31470	HD 22484	$3^h 31^m.8$	$+0°05'$	"	"	"	"	5:07 (11)	5:18	A

Dome Temp. 45°F

Transparency Conditions GOOD

Focus

Dome Temp. 46°F

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Filter	REMARKS		Quality
									Cirrus		
[illegible]	[illegible]	1h 49m W	+50°33′	~3″	3.95	B0p	5-5-5	5-12	HK *	40/18	STRONG
[illegible]	[illegible]	4h 28m W	+58°24′	"	4.89	B3V	5-5-5	"	Hd Ecl. Bin.	40/15	(GUIDING) STRONG
[illegible]	[illegible]	1h 58m W	+0°20′	"	5.2	F9	5-5-5	"	Std. Vel.	40/21	STRONG

Bn, Dy, Hh – visitors   ε Lyr

Date Sept. 14/15, 1968 – Sat./Sun **Observer** HK - Bü **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
31471	Nova Del	$20^h 39^m.7$	$+15° 55'$	6-12	IIa-O	13	67°F	22:06	(70) 23:16	A
31472	XZ Cep	$22^h 29^m.3$	$+66° 38'$	"	"	13		23:40	(145) 02:05	C
31473	AR Cas	$23^h 2^m.6$	$+58° 0'$	"	"	9 long		02:15	(65) 03:20	A
31474	"	"	"	"	"	"		03:24	(12) 03:36	C
31475	φ Per	$1^h 37^m.4$	$+50° 11'$	"	"	9 reg	64°F	03:43	(17) 04:00	A
31476	HD 3712 (α Cas)	$00^h 34^m.8$	$+55° 59'$	"	"	9 reg.	"	04:13	(4) 04:17	C
31477	HD 12929 (α Ari)	$02^h 01^m.5$	$+22° 59'$	"	"	"	"	04:23	(32) 04:55	A
31478	HD 20902 (α Per)	$03^h 17^m.2$	$+49° 30'$	"	"	"		05:01	(4) 05:05	C
31479	HD 29139 (α Tau)	$04^h 30^m.2$	$+16° 18'$	"	"	"	63°F	05:11	(2) 05:13	A
31480	HD 62509 (β Gem)	$07^h 39^m.2$	$+28° 16'$	"	"	"	"	05:25	(3) 05:28	C

Dome Temp. 54°F

Focus

Dome Temp. 48°F

Transparency Conditions SOMEWHAT HAZY
CLOUDY

Ending Time E.S.T.	P.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Tl/Cr	REMARKS		Quality
[illegible]	A	1:54 W	+19°06'	~3"		Nova	5-5-5	.12	Plate broken into 3 pieces, but still hanging together.	400/240	FINE
[illegible]	C	2:48 W	+67°01'	~4"	2.4	O9.5	5-5-5	"	Hd Ecl. Bin.	400/83	V. WEAK
[illegible]	A	3:10 W	+38°23'	"	4.29	B3V	5-5-5	"	Hd Ecl. Bin. (clouds) [illegible]	40/15	BLACK
[illegible]	C	3:27 W	"	"	"	"	5-5-5	"	" " "	[illegible]/15	(guiding) FINE
[illegible]	[illegible]	1:37 W	+50°32'	"	3.95	B0pe	5-5-5	"	Hk * (clouds)	40/16	FINE
[illegible]	C	2:58 W	+56°23'	"	3.34	K0II	5-5-5	"	Br. Std. Vel.	40/30	(guiding) SL. STRONG
[illegible]	[illegible]	2:10 W	+23° 21'	~5"	3.15	K2III	5-5-5	"	" " "	40/30	(guiding) SL. WEAK
[illegible]	C	1:03 W	+49°45'	"	2.27	F5Ib	5-5-5	"	" " " (clouds)	40/30	FINE
[illegible]	[illegible]	0:02 E	+15°27'	"	2.39	K5II	5-5-5	"	" " "	40/[illegible]	FINE
[illegible]	[illegible]	2:55 E	+28°08'	"	2.15	K0III	5-5-5	"	" " "	40/30	FINE

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Date 15-16 Sept [illegible] Observer Ea [illegible] - [illegible] Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.	Hour Angle End
31481	HD 161701	17.41.9	-14° 43'	G12	IIa0	13		19:75	20:25	C	W2:50
~~31482~~	~~chi Cyg~~	~~19:49.4~~	~~1970 2° 18'~~	~~G12~~	~~IIa0~~	~~13~~				A	
31482	HD 186791	19:41.5	+10° 22'	G12	IIa0	9		20:45	20:50	A	W0:33
31483	Nova Del	20:37.7	+18° 48'	G12	IIa0	13		21:03 ~~20:49~~	22:25	C	W1:16

Dome Temp. 59° F **Transparency Conditions** VERY HAZY

Focus ....

Dome Temp. 53° F

Ending Time E.S.T.	P	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	F	REMARKS	Quality
20:15	C	02:00	-14 39	4"	6.0	B9I	5-10	6.2	B8.B9 Bin 40/15	WEAK
					27	MSC			~~[illegible]~~ CAT ... STAR 400/300	
20:10		00:33	+10° 34'		4.15	K3E	24		3rd Std Vel. 40/30	FINE
22:25	C	01:16	19° 05'		?	Nova	5-5		SUDDEN FOG: 400/~~240~~ 158	SL. WEAK
									STAR COMPLETELY DISAPPEARED!	

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Date Mon Sept 16-17/68 **Observer** Hd Bü - Mc **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.	Hour Angle End
31484	HD161701	17 41.9	−14 42	G12	IIaO	9 reg		19 19	(40) 19 59	A	[illegible]
31485	HD171232	18 28.5	+25 25	G12	IIaO	15 short	67°F	20 11	(111) 22 02	C	[illegible]
31486	HD213947	22 29.9	+26 05	"	"	13 short		22 15	(124) 0:19	A	6:13
31487	HD223094	23:41.5	28° 9′	"	"	"	64°F	0:26	(126) 2:32	C	6:14
31488	φ PERS	1:37.4	50° 11′	G12	IIaO	9 reg		3:19	(14) 3:33	C	6:18
~~31489~~											

31488 T1 calibration step wedge for plates 31468 - 31488

Dome Temp.
Focus
Dome Temp.

Dome Temp. 52°F (at ca. 22:00 EST)

Focus ....

Dome Temp. ....

Transparency Conditions Hazy

AFTER 0:?0 EST: EXCELLENT

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Filter	REMARKS		Quality
[illegible]	W 1h 40	−14 41	2"	6.0	B9 I	5-5-14	9, 12	Hb Binary	80/40	([illegible]) FINE
[illegible]	W 2h 58	+25 29	2"	8.66	G8 III	5-5-5		Sec. Std. Vel Kd	400/210	FINE
[illegible]	W 1:13	+26 27	1"	8.93	K4 III	5-5-5		" " " "	400/280	FINE
[illegible]	W 2:14	+28° 32'	2"	8.97	K5 III	5-5-5		" " " " *1 *2	400/242	SL. WEAK ([illegible])
[illegible]	W 1:18	50° 31'	~5"	3.75	B8p	5-10		Apert. 3in POOR SKY	40/18	FINE

mwp. 2/640° −1/18 Sept/62

*1. 2 PIECES, 1 PC ~ 1/2" LONG MISSING (MISSING PIECE SHATTERED)

*2 HEAVY CLOUDS FROM N.NE.

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Date [illegible] **Observer** [illegible] **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
595-1532								1930	0320		
								7:50			

Dome Temp. 56 °F

Focus

Dome Temp.

Transparency Conditions

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
						Fog!	

Date Sept 20/21 Fri/Sat **Observer** G. Go/RG to **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
31489	HD 161701	17 41.9	−14 42	G12	II ao	009	66°F	19 05	(37) 20 32	A	[illegible]
31490	HD 204867	21 26.3	−6 01	"	"	"	"	20:46	(5) 20:51	C	[illegible]
31491	AR Cas	23 25.4	+58 0	"	"	009xL	"	21:23	(7) 21:30	A	[illegible]
31492	HD 209813	22h 01.0	+41°45′	G12	II ao	013	"	21:47	(100) 23 27	C	[illegible]
31493	XZ Cep	22 29.3	+66 38	"	"	013x3/4L	"	23 43	(122) 01h 45m	A	[illegible]
31494	β Ari	01 49	+20 19	G12	II ao	013xEL	64	02h 03m	(2) 02 05	C	[illegible]
31495 (1st ...) } maybe missing	β Ari	01 49	+20 19	"	"	"	64	02h 21m	(2) 02h 23m	A	[illegible]
31496	φ Per	01 37	50 11	"	"	009	64	02:34	(6) 02:40	C	[illegible]
31497	Mira Cet	02 17.8	−03 06	G12	II ao	009	64	02:50	(30) 03:20	A	[illegible]
31498	BF Aur	4h 58.0	+41°09′	"	"	013	64	03:32	(103) 05:15	C	[illegible]

Dome Temp. 55°F

Transparency Conditions Very hazy

Focus

Dome Temp. 51

Ending Time E.S.T.	P.P.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	FILTER	REMARKS	Quality
[illegible]	[illegible]	02 30 W	−14 40	4″	5.0	B9I	5-5-5	4/13	Thick [illegible] (alt. < 20°) 100/10	SL. WEAK
[illegible]	[illegible]	0h 58m E	−05° 41′	4″	3.73	G0Ib	5-5-5	"	BR. ST. VEL. STAR 40/23	(GUIDING) FINE
[illegible]	[illegible]	02h 17m E	+58° 23′	2-3″	4.89	B3V	5-5-5	"	Blew Slow RA Fuse. Fixed Refractor (#2 - NOT PHOTOMETER ONE) X hair light doesn't work. (Go) 40/15	(GUIDING) FINE
[illegible]	[illegible]	01 06 W	+47 05	4″	7.5	K0	5-5-5	"	400/300	FINE
[illegible]	[illegible]	2h 56m W	+67 00	4″	8.4	O9.5	5-5-5	"	Hd BINARY. Sky clearer. 400/100	VERY WEAK
[illegible]	[illegible]	0h 05m E	+20° 42	4″	2.7	A5	5-7	"	Trailed too slow. PART OF COMP. MISSING * 40/15	SL. STRONG
[illegible]	[illegible]	0h 14m W	"	4′	2.7	A5	7-7	"	Trailed fast 40/15	(GUIDING) FINE *
[illegible]	[illegible]	0h 41 W	50° 32′	3-4	3.95	B0pe	15	"	40/18	FINE
[illegible]	[illegible]	0h 45m W	−03° 04′	2″	6-7	Mira	5-5-5	"	PLATE BROKEN IN HOLDER (~1/2" MISSING) → 400/400	FINE
[illegible]	[illegible]	0h 6m E	41° 16′	2″	8.5	B5V	5-5-[illegible]	"	Used [illegible] for 31400. Very thick haze + clouds 400/134	VERY WEAK

* WITH AN EXTREMELY LONG SLIT, THERE IS THE DANGER OF PARTIALLY OR COMPLETELY BLOCKING THE Fe COMP. (SEE # 31456.)

Date Sat-Sun 21-22 Sept, 1968 **Observer** Sc / Bü-Gs **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
31499	β Lyr.	18h 46.4	+33 15	G-12	IIa-O	13.0		21:26	(15) 21:41	A	
31500	β Lyr.	18h 46.4	+33 15	G-12	IIa-O	13.0		21:45	(17) 22:02	C	[illegible]
31501	207813	22 01.0	+45° 45'	G-12	IIa-O	13.0	66°F	22:22	(123) 00:25	A	2 09 W
31502	AR Cas	23 25.4	+58 0	G12	IIaO	009μ	"	00 51	(9) 01 00	C	01 18W
31503	φ Per	1 37.4	+50 11	"	"	009	65°F	01 10	(6) 01 16	A	[illegible]
31504	HD 3712 (α Cas)	00 34.8	+55 59	"	"	"	"	01 25	(3) 01 28	C	[illegible]
31505	HD 4128 β Cet	00 38.6	-18 32	"	"	"	"	01 37	(5) 01 42	A	[illegible]
31506	HD 12929 α Ari	02 01.5	+22 59	"	"	"	"	01 50	(2) 01 52	C	[illegible]
31507	HD 18884 α Cet	02 57.1	+ 3 42	"	"	"	64°F	02 00	(13) 02 13	A	[illegible]
31508	HD 20902 α Per	03 17.2	+49 30	"	"	"	"	03 10	(2) 03 12	C	[illegible]
31509	HD 29139 α Tau	04 30.2	+16 18	"	"	"	"	03 25	(1) 03 26	A	[illegible]
31509 T1	calibration wedge for plates 31484 - 31509										
31509 T2	sky spectrum dome open 1 ft 3".					9h		2 counts	at am /	A	

Dome Temp. 67°F

Transparency Conditions Clear → Hazy

Focus

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS		Quality
	-33 21	2-3"	3.4	Bpe	5-5-5	polaroid position 1	10/30	FINE
2:02 W	+33 21	2-3"	3.4	Bpe	5-5-5	" 2.	10/30	FINE
2.09 W	+47° 06'	2-7"	7.5	K0 III	5-5-5	seeing pretty poor (?); Plate broken into 2 pieces.	10/30	SL. WEAK (?)
01 18 W	+58 23	2"	4.89	B3 V	5-5-5	Hα ECL. BIN.	40/15	(SKY [illegible]) FINE
00 38 E	+50 32	"	3.95	B0pe	5-5-5	Hk *	40/18	SL. STRONG
00 36 W	+56 23	"	3.34	K0 II	5-5-5	BR. ST. VEL. STARS (~~PLATE MARKED 05?~~)	40/30	FINE
00 48 W	+18 06	"	3.06	K1 III	5-5-5	"	40/30	FINE
00 25 E	+23 21	"	3.15	K2 III	5-5-5	" CLOUDS	40/30	FINE
01 00 E	+04 00	"	4.16	M2 III	5-5-5	" CLOUDS	40/30	FINE
00 23 E	+49 45	"	2.27	F5 Ib	5-5-5	" 2:20 TO 3:10 CLOUDY (BROKEN 2PM)	40/21	FINE
01 20 W	+16 27	"	2.39	K5 III	5-5	" Could be fogged. Dark slide possibly not all the way in place.	40/30	FINE

CLOUDY

VERY SLIGHT FOG AT END (?)

[illegible] 2 : [illegible]

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Date 25-26 Sept. 1968 Wed-Thu **Observer** Sc-Ez /mse **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
31510	β Lyr	18h 46.4	+33 15	6-12	IIa-O	13.0	64°F	19 12 (12)	19 24	A	0h 37m w
31511	"	"	"	"	"	"	"	19 26 (14)	19 40	C	0h 54m w
31512	"	"	"	"	"	"	"	19 43 (20)	20:03	A	1h 11m W
31513	"	"	"	"	"	"	"	20:05 (31)	20:36	C	[illegible]
31514	HD 209813	22:01.0	46° 45'	6-12	IIaO	12.0	57°F	1:03 (60)	2:03	C	W 4:02
31514 T1	calibration step wedge for plates 31510 - 31514										

Dome Temp. 47°F

Focus

Dome Temp. 43°F

Transparency Conditions AFTER EST 0:00 — INTERMITTENT CLOUDS

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
924	A	0H 37m W	+33 21	3-4"	3.4	Bpe	5-5-5	polaroid (1) 40/20	FINE
940		0H 54m W	+33 21	3-4"	3.4	"	5-5-5	" (2) 40/20	FINE
[illegible]	A	1h 11m W	+33 21	"	3.4	"	5-5-5	" (1) (DARK SLIDE NOT COMPLETELY IN PLACE) 40/20	LENS FOGGED
[illegible]6	C	1 50 W		"	"	"	5-5-	direct. clouds. 40/18	STRONG
								CLOSED UP AT 21 30 - Ea	
								[* FOUND TELESCOPE JAMMED AGAINST PLATFORM i.e. RUN TOO FAR S. WITH MOTOR & CLUTCH NOT RELEASED]	
2.33	C	W 4:02	47° 06'	≥5"	7.5	KO	5-5	(FIELD DRAWN) 200/47	VERY WEAK
								COMPLETE OVERCAST	

27 Sept/66 // MWP-2 / 67.0°E

Date 27-28 Sept. 1968 Fri-Sat **Observer** Hk-Bū/ Go **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
31515	S Vul	19h 44.3	+27°02'	G108	IIa-O	20x0.6		19:15 (60)	20:15	A	0 37 W
596-1 to 15								2030 (2 50)	2320		
31516	φ Per	01h 37.m4	+50° 11'	G12	IIa-O	9	51°F	23:41 (5)	23:46	A	1:44 E
31517	α Cet	02h 57.m1	+3° 42'	"	"	9		00:06 (14)	00:20	C	2:29 E

Dome Temp.
Focus
Dome Temp.

Dome Temp. 40°F

Focus

Dome Temp. 37°F

Transparency Conditions Good

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS		Quality
10:15	M	0:37 W	+27°13'	4-5"	10.5	F-K Ib	NONE	for Fernie (4009/900 -1000 md. exp) →	4000/192	VERY WEAK
[illegible]								Lightning + clouds.		
[illegible]	A	1:44 E	+30° 33'	~4"-5"	3.95	B0pe	5-5-5		40/17	FINE
[illegible]	C	2:29 E	+03° 58'	"	4.16	M2III	5-10	Broken into 2 pieces (Closed up at 00:30 EST because of clouds)	40/30	BROKEN FINE

Date Sept 28, 29 1968 Observer Go-Sc / Ri Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
597-Ho 12								2130	(3.00) 0:30		

Dome Temp.
Focus
Dome Temp.

Dome Temp. 35

Focus

Dome Temp.

Transparency Conditions Good

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
						Cloudy.	

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Date SEPT. 29 – 30 / 1968 SUN.–MON. **Observer** G-Ci (Go) / (Hz) **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
31518	HD190864	$20^h 01.9^m$	$+35°19'$	G108	IIa-O	25 ex. long	54°	19:53	20:04	A
~~[illegible]~~	Go tried, but not photom.							about 12 min.		
31519	NOVA Del	$20^h 37.7^m$	$+18°48'$	G 12	IIa-O	13 long	52°F	20:53	22:09	A
~~#~~										
31520	SZ Psc	$23^h 08.3^m$	$+02°08'$	G 12	IIa-O	13 short	48°F	~~22~~:22	23:46	C
31520 T1	calibration step wedge for plates 31515 – 31518									

Dome Temp.
Focus
Dome Temp.
Hour Angle End

Dome Temp. 36°F

Focus ....

Dome Temp. 36°F

Transparency Conditions ....

Ending Time E.S.T.	P.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
10 34	A	$00^h\ 7^m$ N		5"	7.96	O	NONE	SHUTTER MECH. ON G108 NEEDS REPAIR. 800/140	VERY STRONG
								Clouded in partially.	
2 ..	A	$01^h\ 46^m$ W	$-19°\ 04$	4"	7:	NOVA	5-5-5	240	SL. WEAK
								Speed control on auto-guider went crazy - at [illegible], would only trail half the slit	
[illegible]	C	$00^h\ 54^m$ W	$+02°\ 34^m$	6"	8.5	K, III	5-10	Cloudy intervals — terminated by clouds 40/40 200	VERY WEAK
			30 Sept/Oct 1 HWP-2 / 66.0°F					$02^h\ 00$ Cloudy [illegible]	

Date Mon Sep 30-Oct 1/68 **Observer** ~~Go~~ Hd, Cal Hc **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I	Hour Angle End
31521	HD 161701	17 41.9	-14 42	G 12	IIaO	9		18 51 (38)	19 29	A	W 2 05
31522	Nova Delf	20 ~~40.0~~ 37.7	+18 55	"	"	9		19 45 (44)	20 29	C	W 10
598-1 to 33								21:25	(7.35) 05:00		
31522.71	calibration step wedge for plates 31521, 22										

Dome Temp. 46°

Focus ....

Dome Temp. ....

Transparency Conditions ....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.		REMARKS	Quality
W 2h 05	-14 41	4"	6.0	B39,	8-6-10		Why is the telescope so 40/20	FINE
W 10m.	+19 05'	2"	7?		8-8-8		badly broken Terribly out of balance? 200/30	BROKEN FINE
							— both RA + dec.	

,Art/68 // MWP-2/68 0°F

Fitzgerald + class — Ring Neb.

Date Mon Tues Oct 22 / 68 **Observer** Ri If / 60 / nse **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
5991 to 12								1935	(2:45) 22:20	
31523	HD 221253	23 25.4	+58° 0'	G12	IIa0	.009L	68°F	22:40	22:51	A
31524	φ Per	01 37.4	+50° 11	"	"	.009		23:01	23:07	C
31525	HD 11636	01 49	+20° 19	"	"	013L		23:17	23:19	A
31526	HD 222368	23 34.8	+05° 05'	"		009		23:29	23:52	C
31527	HD 9138	1:24.9	+5° 38'	G12	IIa0	13		0:02	0:56	A
31528	(52 Psc) HD 219113	23:08.3	+2° 8'	G12	IIa0	135		01:02	2:22	C
	~~BF ...~~	~~4:58.0~~	~~+1° 09'~~	~~G12~~	~~IIa0~~	~~135~~		~~2:27~~		A
31528 T1	calibration strip wedge for plates 31523 – 31527									
31528 T2	" " " " " # 31528									

Dome Temp. 55°F

Focus ....

Dome Temp. ....

Transparency Conditions Poor

0h 3:00 EST — [illegible] CLOUDS FROM [illegible]

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	F	REMARKS		Quality
							Clouds (SL. FOG AT END)		
0h10E	+58 23	~3	4.89	B3V	8-8-8	G-12	Hd Ed. Bin	40/15	FINE (GUIDING)
2h07E	+50°33		3.95	B0pe	8-8-8	"	HK	40/17	FINE (GUIDING)
2h08E	+20 41		2.7	A5	8-8-8		Ed. Bin may be fogged FOGGED 2/3 OF PLATE	40/15	EXP. OK
0h41W	+05°30	~3"	4 64	F7V	8-8-8		Bright Std Vel " clouds	40/21	FINE
E0:06	+6° 0'	3"-10	6.2	K4	5-5-5		Std Vel scattered clouds	400/300	SL. WEAK
W3:36	+2° 33'	3"	8.5-9.5	K1III	5-5		Ed. Bin	800/84	WEAK
	41° 11'	4"	8.5-9.2	B5V	5		Ed. Bin FIELD [illegible]	800/ *	—

2 Oct/68 / MWP-2 / 68.0°F / 7.0 min

" " " 10.0 min

* 15 [illegible] 3:[illegible] [illegible]

[illegible]

Date 3-4 Oct. 1956 Thurs-Fri **Observer** Sc-Ci-Jf-Hs **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
31529	β Lyrae	18h 46m	+33° 15	G 12	II a - O	13 long	56° F	18:51 (21)	19:12	A
31530	"	"	"	"	"	"	"	19:14 (9)	19:[illegible]	C
31531	"	"	"	"	"	"	"	19:24 (8)	19:32	A
31532	HD188001	19h 47.9	+18 25'	G 108	II a - O	20 × long		19:50 (19)	20:[illegible]	A
31533	"	"	"	"	"	"		20:11 (22)	20:33	B
31534	λ Cep. HD 210839 Tr	22h 08.1	+58° 55'	G 108	II a - O	20 × long		21:10 (6)	21:16	C
31535	"	"	"	"	"	"		21:19 (7)	21:26	A
31536	"	"	"	"	"	"		21:30 (6)	21:36	B
31537	HD 209813	22h 01.0m	+46° 45'	G 12	II a - O	13 long		21:54 (124)	23:58	C
31538	γ Cas.	00 50.7	60 11	"	"	13		00 11 (3)	00 14	A
31539		"	"			"		00 18 (3)	00 21	C
	~~[illegible]~~	~~22 14.5~~	~~-03 26~~			"				A

31539 Ti calibration step wedge for plates 31529 - 31539

Dome Temp. 36° F

Focus

Dome Temp.

Transparency Conditions partly cloudy

0033 clouds

<u>0200</u> STILL O'CAST.

<u>0400</u> RAIN

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Filter	REMARKS	Quality
	00h 55m W	+33 21	poor 5" +	3.4	B pe	5-5-5	G-12	position ① clouds 40/20	FINE
	01h 07m W	+33 21	"	"	"	"	"	polarized " ② 40/20	FINE
	1h 16' W	" "	"	"	"	"	"	" ① clouds. 40/[illegible]	FINE
	0 51 W	+18° 37'	"	6.23	08f	none.	"	① [ ] 800/134	(GUIDING) FINE
	1h 15 W	"	"	"	"	"	"	② 800/121	FINE
	0h 23m E	+54° 16'	"	5.29	06f	"	"	② 800/113	FINE
	0h 11m E	"	"	"	"	"	"	① (polarized) 800/110	(GUIDING) FINE
	0h 00m	"	"	"	"	"	"	(1) 800/136	SL. STRONG
	2h 28m	+47° 06'	"	7.5	K0 III	5-5-5	G-12	400/[illegible]	FINE
	00 06 E	+60 33		2.2	B0 IV	7-7	G-12	① 40/30	(GUIDING) SL. STRONG
				"	"	7-7	G-12	② 40/[illegible]	SL. STRONG
				~~3.4~~	~~gM~~	~~5~~	~~G-12~~	① ~~4~~	
								①	

Date 4-5 Oct. 1968 **Observer** HR-Sv-Bü/Ri **Julian Day** /

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
31540	X Cyg	~~22~~ 19h 46m.7	+32° 40'	6-12	IIaO	9 LONG		19:52 (4:12)	00:04	A	4h53W
31541	φ Per	01 37.4	+50° 11	"	"	9		0012 (28)	0040	C	0h33E

Dome Temp.	Focus	Dome Temp.
2		

Dome Temp. 29°F

Focus

Dome Temp. 24°F

Transparency Conditions GOOD

scattered clouds

Ending Time E.S.T.	P.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Filter	REMARKS	Quality
00.04	A	4h53W	+32° 53'	~5"	~8	M5e	5-5-5	G-12	r G Mira Var. clouds 4no .198	* VERY WEAK
00 40	C	0h23E	+50° 32	~4	3.95	B9pe	8-8-8		clouds 40/13	FINE

closed up at 01:00

RAIN

*COMPARISON PARTIALLY CUT OFF DUE TO VERY LONG SLIT

DEC. SLOW MOTION MOTOR SPARKS WHEN SLOW MOTION BUTTON IS PUSHED AND AGAIN WHEN BUTTON IS RELEASED. IS THIS NORMAL ?

205 Visitors: Bn, Dy, Pl 1st - 92, 2nd - 104 E₁ E₂ Lyrae shown

Date 5-6 Oct. 1968 Sat-Sun. **Observer** Sc - Sv / Ri **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
31542.	φ Per.	1h 37.4m	+50° 11'	G12.	IIa-O	90	46°F	22:27 (12)	22:39	A	[illegible]
31543	"	1h 37.4	+50° 11'	G12	IIa-O	9.0	46°F	22:43 (11)	22:54	C	[illegible]
31544	"	1h 37.4	+50° 11	G12	IIa-O	9.0	46 F	22:58 (16)	23:14	A	
31545	o Cet.	2h 14.3	-3° 26.1	G12	IIa-O	13.0		23:24 (31)	23:55	C	
31546	"	"	"	"	"	"		23:59 (21)	0:20	A	[illegible]
31547	AR 14340	2 14.3	+30 26.1	"	"	9xL		00:30 (17)	00:47	C	[illegible]
31548	HD 9138	01 24.9	+05° 38			9		00.57 (42)	01:39	A	[illegible]
31549	HD 29587	04 34.5	+41 57			13	42°F	01:54 (6)	02:55	C	[illegible]
31550	BF Aur	04 58.0	+41° 09			13		03.05 (2:05)	05.10	A	[illegible]
31551	HD 62509 β GEM	07 39.2	+28 16	"	"	9		05:26 (4)	05.30	C	[illegible]

31551 T1 calibration step wedge for plates 31540 - 31551

Dome Temp. 30°F

Transparency Conditions few clouds & hazy

Focus

Dome Temp. 25°F

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2:20 E	+50° 32	3"	3.95	B0pe.	5-5-5	612 polaroid position (1) 40/17	V. SL. WEAK
2:05 E	50° 32	3"	3.95	B0pe.	5-5-5	612 [illegible] (4) 40/17	SL. WEAK
[illegible] 45E	50° 32	3"	3.95	B0pe	5-5-5	612 (2) 40/18	FINE
1:40 E	-3° 05'	"	3-9	gM6e	5-5-5	612 position (1) [illegible]	SL. WEAK
1:15 E	"	"	"	"	"	(2) [illegible]	VERY SL. WEAK
0:47 E			3-9	gM6e	5-5-5	612 2 [illegible] [illegible]	BROKEN SL. WEAK
0h 54 W	+05° 02	~3	6.2	K4	5-5-5	Std Vel [illegible]/150	SL. WEAK
1h 00 E	+42° 04	2-3	7.7	G2	5-5-5	" [illegible]/140	SL. WEAK
0h 50 W	+41° 15'	~3	8.5-9.2	B5I	5-5-5	too much hazy [illegible] 40/90	SL. WEAK (GUIDING)
1h 31 E	+28°07		2.5	K0III	5-5-5	Rad Std Vel 40/30	FINE

76-8:68 ! mwp-2 / 660°F

Date Oct 7/8 1968 Mon/Tues **Observer** Go,L,G,Js/Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
~~31552~~	~~AR Cas~~	23 25.4	+ 58° 00′	G 12	IIa-0	9 long	48°	~~12~~ 0:13(?)	~~12~~ 0:23	C
~~31553~~								36	40	A
31552	HD 9138	01 24.9	+ 05 38	G 12	IIa 0	9		00:57	35′ 01 32	C
600-1 to 20								01:55	(3:50) 05 45	
31552 T1	calibration step wedge for # 31552									

Dome Temp. 37°

Focus

Dome Temp. 32°F

Transparency Conditions good

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1450W	52°23°23'		4.?	B3	8-12	grating was still covered 4	—
04 10E	50° 31					" 40/17	—
0h 55W	+06° 00'	~3	6.2	K4	5-5-5	Std Vel 200/50	SL. WEAK

MWP - 2/67 - 0°C // 8 Oct/68

Date Oct. 8/9, 1968 - Tues./Wed. **Observer** Jf - Hk - Cr / mse **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
31553	NOVA DEL	20h 37.7m	+18° 55′	6-12	IIa-O	13		19:51	(149) 22:20	C	?
31554	Φ Per	1h 37.4m	+50° 11′	"	"	9		22:38	(3) 22:41	A	
31555	"	"	"	"	"	"		22:47	(3) 22:50	A	'
31556	AR Cas HD 221253	23h 25.4m	+58° 00′	"	"	9 LONG		23:11	(1) 23:12	C	1.37 W
31557	β Ari	1h 49.0m	+20° 19′	"	"	13 X LONG	47°F	23:27	(.5) 23:27.5	C	1.32 E
31558	" "	"	"	"	"	"	"	23:33	(1) 23:34	A	1.25 E
31559	SZ Psc	23h 08.3m	+2° 08′	"	"	~~13 LONG~~	"	~~0:03~~		C	
~~31560~~	~~(219113)~~ SZ Psc					15 SH		0:10	(40) 0:50	A	W2.32

Dome Temp. 34 °F

Focus

Dome Temp. 29 °F

Transparency Conditions POOR
21:00 - clouds
22:30 - excellent

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS		Quality
22:00	C	?	+19°05′	~5″	~7.5	—	5-5-5		400/210	FINE
22:41	A		+50°32′	2″	3.95	B0pe	5-5-5	HK * PROBABLY FOGGED (NO FOG) GAIN	40/17	EXTREMELY WEAK
22:50	A		″	2-3″	″	″	″	″ ″ 400 BY MISTAKE	40/17	″ (GAIN [illegible])
23:12	C	1:37 W	+58°22′	″	4.89	B3V	5-5-5	Hd Ecl. Bin.	40/15	[illegible]
23:27.5	C	1:32 E	+20°41′	″	2.7	A5	5-5-5	″ ″ ″ BROKEN: 2 PIECES	40/17	BROKEN *
23:34	A	1:25 E	″	″	″	″	5-5-5	″ ″ ″	40/18	[illegible] no comp? *
—	C			″	~9	K1 III	5-	″ ″ ″ (THIS PLATE WAS IN 2 PIECES, [illegible])	400/	—
1:50	A	W 2:32	+2° 33′	~3″-4″		K1 III	5- 5-	Ecl. Bin. SHORTENED SLIT	400/43	VERY WEAK

0:30 - clouds from S.W.

* SLIT TOO LONG: CUT OFF COMP?

Date Oct 9/10 Wed/Thu 1968 **Observer** F / RS / SV – **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.	Hour Angle End
	MHα 328-116	19 55.0	39 41	G-12	IIaO	8	52°F	19:50 (75)	21.05	A	2 05W
	HD 221253	23 25.4	58 00	"	"	13		22:25 (20)	22:45	C	0 :W
31559 T1	calibration	for plates	31553, 3~~1562, 31567~~								
31559 T2	"	" "	31554 – 31559								

Dome Temp. 39° F

Focus ....

Dome Temp. ....

Transparency Conditions ....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2 05W	39° 26′		11	Em	6–6	wrong field? slit wrong	WEAK COMP? NOTHING
0 15W	58° 24′	2	4.9	B3V	6-6-6	200/80 clouds	FORGOT TO UNCAP??

10 Oct/68 // MWP-2 / 66.0°F : 7.0 min

" " " 12.0 min

Date Oct 10-11/68 THUR/FRI **Observer** Hd CA Ci / Gog / Hr-Jf **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
31560	HD 209813	$22^h\ 01.0^m$	$+46°45'$	0.12	II a-O	13-L		22:50	$0^h\ 10^m$	A	?
60/-1 to 4								$0^h\ 25^m$	0200		
								2CH = 1:35			
31569	T.	calibration strip wedge for plate # 31560									

Dome Temp. 38°F

Focus

Dome Temp.

Transparency Conditions

20·01 [illegible]

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
?		2"	7.5	KO	5-5-5	250 Counts 400/300	FINE
						Clouds.	
						MORE CLOUDS 0230	
mwp-2/ oct 1/ 67.0" = 1						1 Plate from A-2 for MARKED 60'	
						1 " " C [illegible]	

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Date 11/12 Oct 1968 **Observer** Ri-Bū/Sc-Su **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.E.	Hour Angle End
31561	HD 187691	19 46.2	+10 10	G-12	IIa O	.9	54°F	18:30 (50)	19:20	A	0 35 W
31562	HD 212943	22 22.3	+04° 12	"	"	"		19.33 (23)	19.56	C	[illegible] E
31563	HD 204813	22 01.0	+46° 45'	"	"	13		20:22	0:24	A	[illegible] W

Dome Temp. 41°F

Focus

Dome Temp.

Transparency Conditions hazy + fog

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0·35W	+10° 19	3-4	5·8	F8	5-5-5	I think wrong star Std Vel WRONG STAR 200/100	*
1ʰ25E	+04° 35		5·9	K0	5-5-5	" " 200/150	ok *
3ʰ35W	+47° 07′		7.5	K0	5-5-	field drawn hours repaired WRONG STAR 400/200	*

fog becoming heavy – HD209813 –
20 counts took 30ᵐ.
outside of dome quite wet

* BADLY FOGGED: IT APPEARS THE TOP WAS MOMENTARILY OPENED ON THE EXP. BOX

Date Oct 12/13 1968 Sat-Sun **Observer** Sa - Go / Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
602-1 to 2								2130	2200		
~~31564~~	~~o Ceti~~	~~2h 14m.3~~	~~3° 26'~~	~~6-12~~	~~IIa-O~~	~~9.0~~	~~-~~	~~23:10~~	~~23:40~~	~~A~~	
31564	HD 14386 Mira Ceti	2H 14.3	-3°26'			9		23:50 (13)	00:03	C	1h04E
31565	Ø Per	1H 37.4	+50° 11			9		00:16 (4)	00:20	A	0h12E
31566	HD 218393	23H 02.6	+49° 40			9		00:40 (37)	01:17	C	3h?2W
602-3 to 25								0125	0542		
								2CH = 4:47			

Dome Temp.
Focus
Dome Temp.

Dome Temp. 4°

Focus

Dome Temp.

Transparency Conditions good

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
						Readings unstable – cirrus.	(discarded)
			~~6~~	~~M6e~~	~~5-5-5~~	① ~~polaroid~~ plate badly broken 40/30	
1ʰ04E	-03°04	3	~6	M6e	5-5-5	40/30	SL. WEAK
0ʰ12 E	+50° 33′	3-4	3.95	B0pe	5-5-5	HK* Dec. centred, slow motion 40/17	STRONG
3ʰ 22W	+50° 03′	3	6.8	Ave	5-5-5	Hd Be 200/80	SL. WEAK
						P.H. A LOADED IN N.P.	

Date Oct 13/14 1968 Sun/Mon **Observer** Ea Cr Ci/Hc **Julian Day**

Dome Temp. ......
Focus ......
Dome Temp. ......

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
603-1 to 3								~~0:40~~ 18 0:35	~~02:15~~ 19		
31567	HD 209813	$22^h 01.0^m$	+46° 45′	G 12	II a-0	13	58°F	20:14	21:59	A	[illegible]
31568	φ Per	$1^h 37.4$	+50° 11′	G 12	II a-0	9	56°F	22:28	22:34	A	[illegible]
31569	(HD 221253) AR Cas (HD 160?)	$23^h 25.4$	+58° 0′	G 12	II a-0	9	56°F	23:02	23:10	A	[illegible]
31570	β Ari	$01^h 49^m$	+20° 19′	G 12	II a-0	13	55°F	23:35	23:38	A	[illegible]
~~31571~~	~~BF Aur~~	~~$04^h 58^m$~~	~~+41° 09′~~	~~G 12~~	~~II a-0~~	13					

Dome Temp. 43°F

Transparency Conditions

Focus

Dome Temp.

FOGGY 24:00

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
						Variable extinction.	
01h 09m W	+47° 06′	5	7.5	K0	5-5-5	40/250	SL WEAK
1 54 E	+50° 31′		3.95	B0pe	5-5-5	[illegible]/[illegible]	(GUIDING) FINE
0 55 W	+58 22′		4.89	B3V	5-5-5	[illegible]/15	(GUIDING) FINE
1 00 E	+20 41		2.7	A5	5-10	[illegible]/18	(GUIDING) * FINE
			~8.5			FOG! 400/	

* 2/3 OF COMP. MISSING: SLIT TOO LONG

* SILICA GEL IN SPECT. SHOULD BE DRIED

* FINDER X HAIR LIGHT WAS BROKEN WIRE AT POT.

Date Oct 14/15 1968 Mon/Tue **Observer** Go-ng Ir-Hr **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
~~31572~~ 71	Nova Del	20h 37.7	+18°55'	G12	IIaO	13L	46°	18:33 (42)	(8:12) 19:15	C
~~31573~~ 72	BD+61°411	2h 19.0	+61°33'	G108	IIaO	30	44	19:48	0200	A
~~31574~~/73	BF Aur	04 58.0	+41 09	G12	IIaO	13S		0244	(1:52) 0436	C
31574 73 71	calibration step wedge for plates 31561 – 31574									

Dome Temp. 46°

Focus

Dome Temp.

Transparency Conditions Foggy – Poor

Ending Time E.S.T.	P.E.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
19 3[illegible]	[illegible]	0h 51m W	+49° 05′	3″	~8	?!	5-5-5	400/21	FINE
[illegible]	1	0 55W	+61° 53′	4-5	B=11.2	?	2-2-2	*PLATE CAPPER MALFUNCTION! 800 400/41	FINE
								UNIVERSAL JOINT BROKEN! (G 100)	
[illegible]	2	0 52 W	+41 16	4-5	8.5 - 9.2	BS I	5-5.5	Ecl. Bin. Hd. 400/124	VERY WEAK
								0420 Clouds	
								If the dome is to be fastened with someone please	
								use chain	
								ROPE	
								STRING	
								RAG	
								SOMETHING ?	
								* UNIVERSAL COUPLING REPAIRED – ms	
								DRYER CHANGED [illegible]	

15 Oct / 68 / MWP-2 / 68.0°F / 17.0 min
[2A0 G, H8]

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Date Oct 15/16 1968 TUES-WED **Observer** Sc-c / HK-SV **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
31574	γ Cyg (194093)	20h 21.1 (1970) 20:18.6	+40° 09' +39° 56'	G-12	IIa-0	13	65°F	19:02 (2)	19:04	A
31575	"	"	"	"	"	"		19:06 (2)	19:08	C
31576	34 P Cyg (HD 193237)	20h 14.6	+37° 43	G-12	IIa-0	13	64°F	19:58 (8)	20:06	A
31577	HD 193793	20h 17.1	+43° 32'	G-12	IIa-0	13.0	64°F	20:18 (67)	21:25	C
31578	12 Lac (214994)	22h 37.0	+39° 43	G-12	IIa-0	13.0	63°F	21:37 (6)	21:43	A
31579	o And (217675)	22h 57.3	+41° 47	"	"	"	63°F	22:06 (3)	22:09	C
31580	52 Psc (HD 219113)	23h 08.3m	+2° 08'	"	"	" Shut		22:32 (77)	23:49	A
31581	AR Cas 221253	23h 25.4	+58° 00'	"	IIa-0	9.0	62°F	24:02 (6)	24:08	C
31582	HD 217050	22h 52.7m	+48° 09'	"	"	"	62°F	00:35 (10)	00:45	A
31583	HD 217543	22h 56.3m	+38° 10'	"	"	"	61°F	01:00 (31)	01:31	C
31584	φ Per.	01h 37.4m	+50° 11'	"	"	"	60°F	01:41 (3)	01:44	A
31585	HD 12302	01h 55.6m	+57° 12'	"	"	"	60°F	02:21 (132)	4:33	C
31586	HD 21650	03h 24.6m	+41° 25	"	"	"	60°F	05:06 (49)	5:55	A
31587	β Gem (HD 62509)	07h 39.2m	+28° 16'	"	"	"	59°F	06:07 (3)	6:10	C
31588	ε Leo (HD 84441)	09h 40.2m	+24° 14'	"	"	"	59°F	6:45 (6)	6:15	A
31588 TT	calibration step wedge for plates				31576 – 31588					–

Dome Temp. 51°F

Focus

Dome Temp. 45°F

Transparency Conditions good

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00h 63m W	+40° 10'	2"	2.86	F8Ib	none	G-1 2 calcite prism test - good plate (developed) 40/36	FINE
0h 07m W	"	2"	"	"	"	guide on "left" slit to get both images "	FINE
1h 10m W	+37° 56'	2"	5.2	Bp	none	40/30	SL. WEAK
2h 25m W	+43° 46'	2"	6.8	WC6	"	80/60	VERY WEAK
0h 24m W	+40° 05'	"	5.2	B1	"	plate broken - 2 pcs in box 80/61	BROKEN SL. WEAK
0h 29m W	+42° 11'		3.6	B6p	"	40/30	FINE
1h 58m W	+2° 33'		8.5-9.5	K1III	5-5-5	short slit 800/200	VERY WEAK
2 00 W	+58° 24'	~3"	4.9	B3V	5-5-5	Hd Ecl. Bin. 40/15	(SL. GUIDING) FINE
3:11 W	+48° 28'	"	5.2	B3ne	5-5-5	Hd Be * 40/15	(GUIDING) FINE
3:53 W	+38° 35'	"	6.4	B3ne	5-5-5	" " " 40/15	SL. WEAK
1:23 W	+50° 33'	"	3.9	B0pe	5-5-5	Hd * 40/16	(GUIDING) FINE
4:04	+57° 33'	"	8.2	B3e	5-5-5	Hd Be * 400/150	(GUIDING) SL. WEAK
3:48	+41° 38'	2-3"	7.2	B5ne	5-5-5	" " " 400/150	(GUIDING) SL. WEAK
0:12 E	+28° 06'	"	2.15	K0III	5-5-5	Bright Std Vel. 40/31	(GUIDING) FINE
2:05 E	-3° 55'	"	3.76	G0II	5-5-5	" " 'sky [illegible] bright 40/29	(GUIDING) SL. WEAK
1. Set / 6F / mwp-2 / 68.0°F / 7.0 min						SUNRISE = 6:33 EST	

Date Oct 16/17 1968 Wed/Thur **Observer** Go-Rs / **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.E
604-1 to 22								1830	2325	

Dome Temp. 46°F

Focus ....

Dome Temp. ....

Transparency Conditions ....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
						Cloudy — no data. (+ drops of moisture falling on telescope)	

Date Thurs Oct 17-18/68 **Observer** Hd / Jf / CS **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
31589	HD 187691	19 46.2	+10 10	G/12	IIaO	normal 13		18 48 (18)	19 06	H
31590	HD 209813	22 01.0	+46 45	G 12	IIaO	short 13	49 F	19 25 (61)	20 26	C
31590 F	Focus test					13				C

Dome Temp.
Focus
Dome Temp.

Hour Angle End
[illegible]
2 15m

Dome Temp. ....

Focus ....

Dome Temp. ....

Transparency Conditions .... poor ... some clouds

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
W 45ᵐ	10 25	2	5.8	F8	5-5-5	Std vel. Plate broken in 4 3 pieces in box. 200/108	BROKEN FINE
E 15ᵐ	47 07	2	7.5	K0	5-10	Bumping. Fitted night ... – plate probably n.g. 400/31	EXTREMELY WEAK
					20-20		GOOD

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VISITORS : Bn, Bb, Hh

77 - 1st
78 - 2nd

$\epsilon_1 \epsilon_2$ Lyrae shown

Date [illegible] Sat Sun **Observer** [illegible] **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.F
3051-40								21:30		
									05:45	

Dome Temp.
Focus
Dome Temp.
Hour Angle End

Dome Temp. 40°

Transparency Conditions very good

Focus

Dome Temp. 33°

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality

Date Sun. Mon Oct 20-21/68 **Observer** - Hr **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
31591	BF Aur.	04 53.0	+41 07	G 12	IIa O	135		0301	(160) 0541	C
31591 T.	calibration step wedge for 31591									

Dome Temp.

Focus

Dome Temp.

Hour Angle End

0226W

Dome Temp. +31°F

Focus

Dome Temp.

Transparency Conditions Good after 02h00 EST

0335 Clouds.

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0511	0220W	4117	3	8.5 - 9.2	B5 V	5-5-5	Hd Ecl. Bin. 400/73	SL. WEAK

mwp-2 / 10 min @ 69° = 1/2.6et/cf

visitors: ~80 in MK's 216 class
M13, ε Lyr

Date MON-TUES Oct 21-22/68 **Observer** HK-Ir/Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
31592	φ Per	1h 37.4	50° 11	G12	Π-a-O	9	52°F	21:20	(10) 21:30	C
31593	HD 209813	22h 01.0m	+46° 45'	"	"	13 sharp	31°F	22:02	(60) 23:02	C
31594	AR Cas	23h 25.4	+55 00'	"	"	9 long	50°F	23:24	(6) 23:30	C
31595	β Ari	01h 49.0m	+20° 19'	"	"	13	"	23:44	(2) 23:46	A
31596	HD 20017 (HD20017 Tn '95)	03 07.9	+48 19	"	"	13		23:57	(93) 01:31	C
31597	HD 26162	04 3.3	+19 21			13		01:41	(34) 02:15	A
31598	HD 35410	05 19.4	-00 59			9	48°F	02:29	(41) 03.10	C
31599	HD 44131	06 15.0	-2 54	"	"	9		03:20	(51) 04:11	A
31600	HD 66141	07 57.1	+02 36	"	"	9		04:20	(42) 05:02	C
31601	β Gem HD 62509	07 39.2	+28° 16			9	46°	05:13	(12) 05:25	A
31602	α Hya HD 81797	09 22.7	-8° 14			9		05:33	(22) 05:55	C
31602 T1	calibration step wedge for plates 31592 - 31602									

Dome Temp. +35 F

Transparency Conditions FAIR

Focus

Dome Temp. -29°F

Ending Time E.S.T.	P.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS		Quality
1:30	C	2:28E	50° 33'	3"	3.95	B0pe	5-5-5	Hk *	40/16	FINE
3:02	C	2:42W	+47° 07'	2-3"	7.5	K0	5-5-5	Spect. Bin	400/200	FINE
3:30	[illegible]	1:45W	+58° 24'	2"	4.87	B3V	5-5-5	Hd Ed. Bin.	40/15	(SL. GUIDING) FINE
[illegible]	A	0:22E	+20° 39'	"	2.7	A5	5-5-5	" " " BROKEN: 2 PIECES	40/15	BROKEN FINE (SL. GUIDING)
[illegible]	C	0h 04W	+48° 35'	~3	7.9	B9ne	5-5-5	Hd Be field checks	400/150	SL. WEAK
[illegible]	[illegible]	0h 07E	+19° 34	3	6.4	K1	5-5-5	Std. Vel	400/300	FINE
05:10	[illegible]	0h 27E	-00 54	3	5.9	K0	5-5-5	Std Vel	200/150	V. SL. WEAK
[illegible]	[illegible]	0h 21E	-02 53		6.5	M1	5-5-5	Std Vel Broken 2 Pieces	200/150	BROKEN WEAK
05:32	[illegible]	1h 11E	+02 28	4	5.5	K3	5-5-5	Std Vel clouds from S.W. Broken 2 Pieces	200/150	BROKEN V. SL. WEAK
05:35	[illegible]	0h 32E	+28° 07		2.15	K0III	5-5-5	Bright Std Vel Broken 2 Pieces	40/30	BROKEN FINE
05:55	[illegible]	1h 45E	-08 39		3.40	K4III	5-5-5	" " " ditto	40/30	FINE

22 6f/6f/ mwp 2/68.0°F/70 min

235 Visitors - Go, Bb, Ny - 1st - 66 slides
2nd - 63 ε Lyrae

Date Sat - Sun Oct. 26-27/1968 **Observer** Go - L **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
606 - Ho 3								2200	2300	

Dome Temp.
Focus
Dome Temp.
Hour Angle End

Dome Temp. ....

Focus ....

Dome Temp. 20

Transparency Conditions ....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
						Clouds	

Date Mon-Tues Oct 28-29/68 **Observer** Ri Gr **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
31603	φ Per.	1h 37.4	+50°11′	G 12	IIa O	9	43°F	00 07 (5)	00:12	A
31604	HD11636	01 49	+20019	"	"	13 L		00 20 (2)	00 22	C
31605	HD22484	03: 31.8	+00°05	"	"	9	42°F	00:33 (22)	0h 55m	A
31606	HD 29139	04: 30.2	+16°18′	"	"	9		01h: 02 (2)	01:04	C
31607	(α Per) HD 20902	03:17.2	+49°32′	"	"	9		01:12 (12)	01:24	A
31607 T,	calibration strip wedge for plates 31603 - 31607									

Dome Temp. +25°F

Focus

Dome Temp.

Transparency Conditions clouds

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0h 42m W	+50°:34	5"	3.95	B0pe	5-5-5	Clouds in N. 40/1.6	(GUIDING) SL. STRONG
0h 41 W	+20° 40	•	2.7	A5	15	40/15	(GUIDING) FINE
0h 28m E	+00° 20'		5.2	F9	5-5-5	Std Vel. 200/100	FINE
1:17 E	+16° 30'	5"	2.39	K5III	5-5-5	Std Vel. 20/30	FINE
0:15 W	+49° 47'		2.27	F5II	5-5-5	Std vel. Cloudy. 40/21.12	FINE

MWP 2/62°F/20 Oct/64

Tue - Wed.

Date Oct. 29-30, 1968 **Observer** Sc, Cs **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
31608	ζ Cyg. HD202109	1970 21 11.7	+30 06	G-12	IIa-O	9.0	42°F	18h. 43m (14)	18 57	A	oh2m
		1900 21 08.7	+29 49 Fn 95								

Dome Temp. 24°F

Focus ....

Dome Temp. ....

Transparency Conditions ....

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
[illegible]		h m			[illegible]	[illegible]	[illegible]	[illegible] 40/40	

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Date Oct 30/31 1968 (Vet/Th) Observer F Rs Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
31609	MHα 328-116	19 55.0	39° 41'	G-12	IIa O	1.0	39	19:30	158 22:08	C
~~31610~~	~~HD 17506~~	~~02 43.4~~	~~55 29~~	~~"~~	"					D

Dome Temp. 20 °F

Focus ....

Dome Temp. ....

Transparency Conditions good until 20^h

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2 11		4^h 31W	39°46′	1-4	10.8	Em	5-5-5	F emission object (regarded in R.A.) end mw	OK
					3.76	~~K5 Ib~~		~~E&K Program~~ clouded out	
								cold	
							*	* Could not get exp. meter to work!!	
								(TESTED ON 3^{RD} MAG. *)	
								EXP. MTR. CHECKED – [illegible] –HC	

20:30-22:00 ~50 visitors in Miss Northcott's class
M15

Date Oct 31/Nov 1, 1968 - Thurs/Fri **Observer** HK Cs / Hr - JG **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
31610	HD 206773	21h 37.3m	+57°37'	S 12	IIa-O	9	43°F	18:46	(18) 19:04	C
31611	HD 217050	22h 52.7m	+48°09'	"	"	"	"	19:15	(7) 19:22	A
31612	HD 217675	22h 52.8m	+41°49'	"	"		42°F	19:31	(21) 19:52	C
31613	HD 217543	22h 55.3m	+38°10'	"	"	"	"	20:01	(12) 20:13	A
31614	φ Per	1h 37.4m	+50°11'	"		"	"	20:21	(3) 20:24	C
31615	HD 209813	22h 01.0m	+46°45'	"	"	"	"	22:00	(64) 23:04	A
31616	AR Cas	23h 25.4m	+58°00'	"	"	"	41°F	23:11	(7) 23:18	C
31617	3 Ari	1h 49.0m	+20°19'	"	"	"	"	23:28	(2) 23:30	A
31618	HD 15472	2h 24.4m	+70°30'	"	"	"	"	23:53	(82) 01 15	C
31619	BF Aur	04 58.0	+41 09	"	"	SHORT 13		0131	(61) 0232	L

31619 T1 calibration step wedge for plates 31609 – 31619

Dome Temp. 30°F

Focus ....

Dome Temp. ....

Transparency Conditions good

Ending Time E.S.T.	P…	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS		Quality
[illegible]	[illegible]	0:14 E	+57°37′	3-4″	7.0	B0ne	5-5-5	Hd Be *	400/150	(GUIDING) FINE
[illegible]	[illegible]	1:10 E	+18°31′	"	5.2	B3ne	5-5-5	" " "	40/15	FINE
[illegible]	[illegible]	0:50 E	+50°03′	"	6.8	Ane	5-5-5	" " "	400/150	FINE
[illegible]	[illegible]	0:23 E	+38°32′	"	6.4	B3ne	5-5-5	" " "	40/15	FINE
20:24	[illegible]	2.53 E	+50°33′	"	3.5	B0pe	5-5-5	Hd *	40/16	(GUIDING) FINE
23:04	[illegible]	3:25 W	+47°07′	4-5″	7.5	K0	5-5-5		400/200	(GUIDING) FINE
[illegible]	[illegible]	2:13 W	+58°23′	"	4.89	B3V	5-5-5	Hd Eclipsing Binary	40/15	(GUIDING) FINE
[illegible]	[illegible]	0:2 W	+20°41′	"	2.7	A5	5-5-5	" " " BROKEN! BIG PIECE SMALL "	40/15	BROKEN GUIDING * FINE
[illegible]	[illegible]	?	+70°51′	"	8.0	B4me	5-5-5	Hd Be *	400/150	FINE
[illegible]	[illegible]	0005 E	+41115		8.5 9.2	B5V	5-10	Hd Ecl. Bin CLOUDS	400/56	VERY WEAK

1 hev/cell mwD-2/64.0°F

* SLIT TOO LONG: CUT OFF COMP

Date 1968, Nov. 1-2 Fri-Sat **Observer** Sc - SW **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
316 20	φ Per.	1h 37.m4	+50° 11	G-12	IIa-O	9.0 long	47°F	01:23 (11)	01:34	A	[illegible] W
316 21	HD 21650	3h 24.6	+41° 25	G-12	IIa-O	13.0		01:53 (52)	02:45	C	1.44W
316 22	BF Aur.	4h 58.0	+41 09	G-12	IIa-O	13.0 short		3:15 (2:45)	6:00	A	[illegible] W

Dome Temp.

Focus

Dome Temp.

Dome Temp. 36°F

Transparency Conditions Hazy

Focus

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2:21W	+59° 32'	2-3"	? 9.5	80 pa	5-5-5	Clouds 40/17	(GUIDING) SL. STRONG
1:44W	+41° 39'	2-3"	7.2	105 ne	5-5-5	400/157	FINE
3:26W	+41° 17'	"	8.5	85 V	5-5	field for 31400 comet field 400/6G5	WEAK

Date 1968 Nov 2-3 ~~1st [illegible]~~ **Observer** P. S. **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.E.	Hour Angle End
31623	φ Per	01 37.4	+50° 11	6-12	IIa0	9	47°F	00 02	(4) 00 06	A	0:50w
31624	HD 20017	03 07.9	+48 19	–	IIa0	13		00 16	(110) 02 06	C	[illegible]

Dome Temp. 30°F

Focus

Dome Temp. 24°F

Transparency Conditions hazy + few clouds

Ending Time E.S.T.	Pl.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
36	H	0ʰ 56 W	+50° 34	~4	3.95	B8pe	5-5-5	40/16	SL. STRONG BROKEN
3c	C	1ʰ 26 W	+48 36	~3	7.4	B9ne	5-5-5	4d-8e 2 pieces field checks clouds 400/150	V. SL. WEAK

32
24
3

Date 3/4 Nov. 1968 Sun/Mon **Observer** [illegible] / Hr Ci **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
31625	R CAS	23h 53m.3	+50° 49.9'	G-12	IIa-0	13	+40°F	1935	(3:55) 2330	A	[illegible]
31626	28 TAU			G-12	"	"	"	2345	(10) 2355	C	[illegible]
31627	ϕ PER	01h 37m.4	+50° 71'	G-12	"	"		00:11	(2) 0013	C	[illegible]
31628	HD 21650 MWC 68	03h 24m.6	+41° 25'	G-12	"	"	38°F	00:29	(1:43) 02:12	A	[illegible]

31628 T I calibration step wedge for plates 31620 – 31628

Dome Temp. 26°F

Focus ....

Dome Temp. 22°F

Transparency Conditions CLOUDY AT FIRST. CLEAR
0035 CLOUDS

exp meter in balance when pot is almost completely cont. circuits

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2h 10m W	+50° 14′	2″-4″ variable	~8.0	Me	Fe 5+5+5	some light clouds 400/360	FINE
1h 15m E	+24° 05′	3″	~5.2	B8e	Fe 8+8	PLEIONE 40/17	* SL. STRONG
1h 06m W	+50° 32′		3.95	B0 pec	15	40/17	* STRONG
1h 19m W	+41° 37′	3″	7.2	B5	5-5-5	Hd Be Bin. 400/180	SL. STRONG

* SL. FOG AT END.

4 200/6+ 1 MWP-2 // 46.0° F

END BROKE OFF P.H. 'C' slide
REPLACED w/ P.H 'B' slide } 5-12

Date Nov. 4/5, 1968 - Mon./Tues. **Observer** Ir - Hk - (Cs) **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.F
31629	Φ Per	$1^h 37.^m4$	+50° 11′	G-12	IIa-O	9	42°F	20:38	(20) 20:58	A
31629 T1	calibration	step wedge for # 31629								

Dome Temp. 28° F

Focus

Dome Temp. 28° F

Transparency Conditions Very murky (i.e. practically [illegible])

Ending Time E.S.T.	P.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
[illegible] 57	F	2:04 E	+50°33′	4″	3.95	80 pe	5-10	Hk * (heavy clouds + full moon) 40/16	(GUIDING) FINE
								up to 20:00 – temporary cover of clouds	
		mwp-2/66°F/1	5200/6F					21:00 – permanent cloudiness set in	

Date Nov 5/6 1968 TUES / WENSd **Observer** Sc-Sv **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
31630	HD ~~[illegible]~~ 197345 Tm α Cyg	1970 20h 40.4	+45° 10'	6-12	IIa-O	9.0	46°F	18h 33m.5 (2.5)	18h 35m	A	
31631	α Cyg	"	"	"	"	"	"	18h 35m (1)	18:39	C	
31632	HD217050	22h 52.7	+48° 09'	6-12	IIa-O	13.0		19:04 (26)	19:30	A	[illegible] E
31633	"	"	"	"	"	"		19:32 (20)	19:52	C	[illegible] E
31634	AR CAS	23 25.4	+5[illegible]° 0'	6-12	IIa-O	9.0		21:19		A	[illegible] W

31634 " calibration step wedge for 31632 - 4

Dome Temp.
Focus
Dome Temp.

Dome Temp. 32°F

Transparency Conditions very hazy

Focus

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	+45°12′	2″	1.35	A2 Ia	none	calcite + 3/4 test rt image 20/8	
	"	"	"	"	"	left image	
0:42 E	+48° 32′	"	5.2	B3ne	5-5-5	40/17	(GUIDING) FINE
0:20 E	"	"	"	"	5-5-5	100/17	FINE
0:42 W	+58° 22′	"	4.89	B3 V	5-5-5	40/8	(GUIDING) FINE
				=		Heavy haze coming in the NW - clouds.	

mw R:21 67°F H 6 200/68

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Date Nov. 11/12, 1968 - Mon./Tues. Observer Hk-Ir Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
31635	φ Per	$1^h 37^m.4$	+50° 11′	6-12	IIa-O	9	38°F	21:25 (70)	22:35	C
31635 T1	calibration step wedge for plate 31635									

Dome Temp. 22 °F

Transparency Conditions very thick haze (i.e. cloudy)

Focus

Dome Temp. 20 °F

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0:[illegible]0	+50° 34'	4-6"	3.95	80pe	5-5 5	Hk ☆ (clouds) 40/15½	FINE
						23:00 - GOT EVEN CLOUDIER - WENT HOME	
mwn-2/66°= ∥/3 2[illegible]/68							
						RATE METER WORKS IMPROPERLY	
						INTEGRATOR ALL RIGHT	

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Date Nov. 18/19, 1968 - Mon-Tues **Observer** HK R. Sv **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
31636	HD10516 ~~HD5394~~ φ Per	1h 37m.4	+50° 11′	G-12	IIa-O	9	38°F	18:40 (2)	18:42	C	[illegible]
31637	γ Cas	0h 50m.7	+60° 11′	"	"	"	"	18:51 (9) 19:08	18:57 19:09	A	[illegible]
31638	"	"	"	"	"	"	"	19:15 (2)	19:17	C	[illegible]
31639	AR Cas	23h 25m.4	+58° 00′	"	"	9 LONG	"	19:30 (4)	19:34	A	[illegible]
31640	β Ari	1h 49m.0	+20° 19′	"	"	13 LONG	"	19:47 (2)	19:49	C	[illegible]
31641	HD 209813	22h 01m.0	+46° 45′	"	"	9	"	20:18	72 21:30	A	[illegible]
31642	HD 35410	05 19.4	-00 59			9		01:21	35 01 56	C	[illegible]
31642 F	Focus test		set out/mini position			9	36F			A	
31642 T1	calibration step wedge for plates 31636 - 31642										

Nov 20

Ri Open up had closed up again P.H A LOADED

Dome Temp.

Focus

Dome Temp.

Dome Temp. 24°F

Focus

Dome Temp. 20°F

Transparency Conditions initially: low flying clouds
19:15: very clear except for
occasional quick clouds

Ending Time E.S.T.	P.I.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS		Quality
[illegible]	C	3:26 E	+50°34′	3-4	3.95	B0pe	5-5-5	HR *	90/16	(GUIDING) FINE
[illegible]	A	2:12 E	+50°34′	"	2.0	B0pe	5-5-5	Don Morton * [illegible]	90/15	(GUIDING) FINE
[illegible]		2:04 E	"	"	"	"	5-5-5	" " " 3X NORMAL	90/45	STRONG
	A	0:20 E	+58°22′	"	4.89	B3V	5-5-5	Hd Ecl. Bin.	90/15	FINE
[illegible]	C	2:30 E	+20°41′	"	2.7	A5	5-5-5	" " "	90/15	* POOR GUIDING EXP. OK
[illegible]		3:01 W	+47°07′	4-5″	7.5	K0	5-5-5		400/200	SL. WEAK
								21:30 - clouded over		
1:56		0h 09 W	-0 55		5.9	K0	5-5-5	[illegible] clouds	200/150	SL. WEAK
							20/20			[illegible]
			19 Nov/68 //	mw	P.21	26°F		clouded over [illegible]		

* TOO LONG A SLIT: CUT COMPAR OFF COMPLETELY

Date 20 Nov 1968 **Observer** MSE **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I
31642 F2	focus test	in in/out out		612	II aO	9	29°F			A
31642 F3	"	"								A

Dome Temp.
Focus
Dome Temp.
Hour Angle End

Dome Temp. ....

Focus ....

Dome Temp. ....

Transparency Conditions ....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
					5/5 (no filter)	set from 70 R to 30 R (through 100 R) (c.w. as viewed above knob) (set to 50 R then down to 30 R for backlash)	
							SL. C TO VIOLET
					5/5 no filter	– focus set to 50 R. (D-19)	GOOD

Dome Temp.
Focus
Dome Temp.

Date............................ **Observer**............................ **Julian Day**............................

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I	Hour Angle End

Dome Temp. ....

Focus ....

Dome Temp. ....

Transparency Conditions ....

Ending Time E.S.T.	P.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality

Wed. - Thurs.

Date ~~Nov.~~ 20-21, 1962 **Observer** Rs — Cs - HK **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.F	Hour Angle End
31643 ~~3616643~~	φ Per	01h 37.4m	+50° 11'	G12	IIa-O	9	32	11h 50m	(E) 17h 55m	H	4h 15 E
31643 T1	calibration	step wedge		G12		for # 31643					

Nov 22 Still Cloudy at 3:30 AM HV

Nov 21 " " MSS

" 24-25 Still overcast at 2:30 HV

" 25-26 Clouded in quickly, 1 plate arced + discarded HK JR

Dome Temp. 15

Transparency Conditions fair

Focus

Dome Temp. 15

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
17h 55m	4h 05 E	+50° 34′	4″	3.95	80 pe	5·5·5	HK * 40/17.2	(GUIDING) FINE
							18:00 - clouds	
		mwp: 2/67°=11.21 hev/a8						

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Hk (Φ Per)

Date Nov. 27-28, 1968 / Wed Thurs **Observer** F-Ea / L-Msl **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.F
31644	Φ Per	1h 37.4	+50° 11′	6-12	IIa-O	9	36°F	17 ~~15~~:38 (4)	17 15:42	C
31645	MWC 328-116	17 52.0	+39 41	"	"	9 short		18:13 3HR	21:13	C
31646	Saturn W RING	1968 1 14.8	+5° 00.7	"	"	9 extra v. long		21:37 7	21 44	A
31647	"	"	"					21:45 8	21:53	C
31648	E RING	"	"					21:54 9	22:51	A
31649	MOON							22:11 4	22:15	
31650	HD 3651	0 34.2	20° 43′	"	"	9 LONG		2:45 46	3:31	A
31651	~~HD~~ BF AUR	4:58.0	41° 09′	6-12	IaO	13 2/3L		1:49 2:40	4:29	A

31651 T1 calibration step wedge for # 31644 - 31650

31651 T2 " " " " 31651

Dome Temp. 19°F

Focus

Dome Temp.

Transparency Conditions Good at start
then scattered cloud after 20h

Ending Time E.S.T.	Pl.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS		Quality
19		3:51 E	+52° 34′	3-4″	3.95	B2p	5-5-5	Hk *	40/17	(GUIDING) FINE
		5:26 W	+39 47′	3-5	10.8	Em	5-5-5	F * Emission	408/53	GOOD
			+ 5° 02′				15	F Program	20/20	* STRONG
			+ 5° 02′					F "	20/20	* STRONG
			+ 5° 02′					F	20/20	* STRONG
								F Aristarchus ? (alternate)	20/20	* STRONG
3 31	A	3:06 W	+20° 54′		5.8	K0 V	5-5-	Bk Program NB (Exp 2×10 meter sticking)	20/22	VERY WEAK
29		3 06 W	41° 17′	4″	8.5-9.2	B5 V	5-5-5	Eclipsing Binary	800/122	WEAK

OVERCAST (04:30)

DEC. SLOW MOTION MALFUNCTION ~23.00 (LINK-PIN SHEARED; REPAIRED BY L.)

NB ALL F & BK PLATES NEED A CALIBRATION PLATE

MWP-2 129 Rev/64 T = 67°F 3 min

½ min

* Too long a slit; the Fe comp was almost lost

DEC 3/63 EX. MTR CHECKED ... CHANGED AK

* Exp Meter difficult to start.

Date Dec 7/8, 1968 / Sat–Sun **Observer** Bü (r G) – Wz / Ri Ci **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
31652	φ Per	1h 37m.4	+50° 11′	G12	IIa-O	9	28°F	22:35	(3) 22:39	A
31653	"	"	"	"	"	"	26°F	22:48	(4) 22:52	C
31654	HD 23862 Tau Pleione (28 Tau)	03h 43m.2	+23° 50′	"	"	13 (3× long)		23:23	(24) 23:47	A
31655	HD 45829	06h 24.6	+07° 59′	"	"	9	22°F	00:12	3:00 03:12	C
31656	HD 46329	06h 37.8	+25° 14′	"	"	9		03:21	(9) 03:30	A
~~31657~~	~~HD 62509~~	~~07h 39.2~~	~~+28° 16′~~	~~"~~	~~"~~	~~9~~				
31656F	focus test			out out / in in			22°F			

Dome Temp. 7°F

Transparency Conditions hazy; scattered cirrus clouds

Focus

Dome Temp. + 3°F

Ending Time E.S.T.	P.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS		Quality
[illegible]	A	01 49 W	+50° 33′	3″	3.95	B0pe	5-5-5			STRONG
[illegible]	C	02 01 W	+50° 33′	3″	"	"	5-5-5			FINE
[illegible]	A	00 51 W	+24° 04′	3″	4.8	B8p	none			FINE
[illegible]	C	01 35 W	+07° 58′		6.8	K0	5-5-5	clouds	4?/12	L. WEAK
[illegible]	A	01 40 w	+25° 11		3.1	G8	5-5-5	"	41/21	FINE
					~~1.2~~	~~K0 III~~		"	20/15	
							5 5	no filter Broken 2 pins		SL. C T R. → BROKEN

Exposure meter inoperative! Tonight's exposures (31652 – 31656) based on exposure graph drawn up by rG

overload light on power supply burned out rlg

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Dome Temp.
Focus
Dome Temp.

Date Sun/mon 8/9 Dec 1968 **Observer** RG-Co/H2, Ci **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
31657	Nova Del	20 37.7	+18 55	G12	IIa-O	13 long	20°F	1730	(165) 2015	C	4h 33m
31658	β Ari	01h 49m	+20°19'	G12	IIa-O	13 long	20°F	20:46:30	(1½) 20:48:00	C	[illegible]
31659	φ Per	01h 37.4m	+50°11'	"	"	13 long	20°F	21:15	(3) 21:18	A	0h 29m
31660	"	"	"	"	"	9	19°F	21:25	(5) 21:30	C	0h 43m
31661	HD3657	00h 34.2m	20°43'	"	"	9 long	18°F	21:46	(175) 00 41	A	[illegible]
31662	HD 44033	06h 14.4m	+14°42'	"	"	"	16°F	01:07	(101) 02 48	C	[illegible]
31663	HD 44537	06h 17.2	+49°20'	"	"	"	14°F	03:07	(62) 04 09	A	[illegible]
31664	HD 101501	11h 35.8	+34°46'	"	"	"	11°F	04:41	(38) 05 19	C	[illegible]
31665	HD 89449	10h 14.3	+19°59	"	"	"	10°F	05:37	(18) 05 55	A	[illegible]
31666	HD 107328	12h 15.3	+03°53	"	"	"		06:15	(36) 06 51	C	[illegible]
31666 T1	calibration step wedge for plates 31652 - 31661										
31666 T2	" " " " " 31662 - 31666										

Dome Temp. +8° F

Transparency Conditions Clear – gusty wind

Focus

Dome Temp. ~~8° F~~ +12° F

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
[illegible]	[illegible]	4h 30m W	+19°06′	4″	8:	Nova	5-5-5	had to rewind dec. fast motion screw 204/400	FINE
[illegible]	[illegible]	0h 09m E	+20°41′	3″	2.7	A5	8-8	15/40	SL. STRONG
[illegible]	[illegible]	0h 29m W	+50°34′	2+″ var.	3.9	B0pe	8-8	windy 20/40	FINE
[illegible]	[illegible]	0h 43m W	+50°34′	3″	3.9	"	"	18/40	VERY STRONG
[illegible]	[illegible]	04 56W	+20°53′	3→6″	7.0	K0V	5-10	Bk seeing deteriorated after 1st half hour. 195/400	FINE
[illegible]	[illegible]	01h 35 W	+14°41′	3″	6.0?	K3 16	5-5-5	" 160/200	V. SL. WEAK
[illegible]	[illegible]	02 42W	+49°19′	2+	6.1	K5	5-5-5	" 158/200	V. SL. [illegible]
[illegible]	[illegible]	01h 24 E	+34°23′		6.9	G8	5-5-5	" 132/200	FINE
[illegible]	[illegible]	00h 33 W	+19°40′	3″	5.3	F5	5-5-5	STOVEL 137/200	FINE
[illegible]	[illegible]	00h 22 E	+23°26′	"	6.1	K1	5-5-5	127/200	SL. WEAK

qualified MCOP 2/66°F

0710 Shutters [illegible]
by hand or motor
[illegible]

Date Mon/Tue 9/10 Dec **Observer** ~~Fr. HACK~~ - GH Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
31667	φ Per	1h 37m.4	50° 11'	G12	II-a-0	9	+14°F.	18:02 (4)	18:06	C	2h 33m E
31668	NOVA DEL	20h 37m.1	+18° 55'	"	"	"	+13°F	18:49 (77)	20:06	A	[illegible]
31669	+57° 257			G40	"	18	+13°F	21:25 (100)	23:05	A	[illegible]
31670	+57° 257	(1967.0)		"	"	"	"	23:32 (4)	23:36	C	[illegible]
31671	HD 26162	4h 7.2	+19° 32	"	"	18		00:07 (11)	00:18	B	[illegible] W
31672	"	"	"	"	"	"		00:23 (12)	00:35	C	[illegible] W
31673	HD 14542	2h 20.7	+57° 15	"	"	"	"	00:50 (4)	00:54	B	3h [illegible] W
31674	"	"	"	"	"	"	10°F	00:55 (7)	01:02	C	3h [illegible] W
31675	HD 20365	3h 16.2	+57° 2.2	"	"	"	"	1:10 (1)	1:11	B	[illegible]
31676	HD 25[illegible]	[illegible]	+42° 5.8	"	"	"	10°F	01:34 (36)	02:10	C	
31677	"	"	"	"	"	"	"	02:11 (29)	02:40	C	3h 50m W
31678	HD 46141	07 57.1	+02 36	G12	"	9	10°F	02:55 (49)	03:44	C	[illegible] W
31679	HD 101013	11h 32.5	+51° 10	"	"	9	10°F	3:55 (71)	05:06	A	[illegible] E
31680	HD 62509	07 59.2	+28° 16	"	"	"		05:26 (2)	05:28	C	[illegible] W

Dome Temp. -4°F + 16°F **Transparency Conditions** Clear

Focus

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS		Quality
2h33mE	+50°34'	4"	3.55	B0 pe	5-5-5	Hα *	40/17	FINE
4h23mW	+17°06'	3"	~8	?	5-5-5	IRON ARC ALMOST CUT OFF: TOO LONG 4 SLIT	400/100	OK
2h46mW	+58°09'	3"	12.7	~K	2-2	GH * [illegible]	400/40	(GUIDING) SL. STRONG
3h15mW	+58°03'	3"	7.4	B.6eIb	2-2	"	[illegible]/25	FOGGED
1h10W	19°34'		6.4	K1	2-2	"	400/60	SL. STRONG
1h26W	"		"	"	2-2	GH *	400/75	STRONG
3h34W	+57°15		7.2	B8	2-2	"	400/20	SL. STRONG
3h42W	"		"	"	"	"	400/30	STRONG
3h 55W	+[illegible]8	~4	5.1	B3	2-2	"	400/25	STRONG
	+42°00	~2	7.7	G2	2-2	"	400/40	SL. STRONG
2h50W			/		2-2	"	300/100	SL. STRONG
0h43W	-02°27		5.5	K3	5-5-5	Std Vel	200/150	FINE
1h30E	+50°48		6.0	K1	5-5-5	BK	400/300	FINE
2h45W	+28°06		7.18	K0III	20		20/15	FINE

BK #3:10 UNEXPOSED PLATES EXPOSED TO L[illegible]

RA. SLOW MOTION TOO SLOW Heaters were off R.

Date Tue., [illegible]/1968 **Observer** G.H.Li **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
31681	HD 76291	8^h 50.1	+06° 20'	612	II-aO	9	10°F	05:37 [9]	5:46	A
31682	HD 139195	15 31.7	+10° 21	"	"	"		06:06 [54]	7:00	
31682	Tr. calibration strip wedge for plates ~~31[illegible] – 3166[illegible], 316[illegible] – 316[illegible]~~ 31667 – 31682.									

Dome Temp.
Focus
Dome Temp.
Hour Angle End

Dome Temp. .... **Transparency Conditions** ....

Focus ....

Dome Temp. ~~-10°F~~ 10°F

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
5:??	A	1h52W	+06°06'	5"	+3.1	K0III	5-5-5	BK 70/30	FINE
7:0?		3h35E	+10°09'		5.4	K1	5-5-	BK 200/~~150~~ 130	FINE

10 Dec/68// ... 66°F

Date 10/11 Jan/68 - Tue **Observer** MSe-HW/ **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.F
31683	Nova Del.	20:37.7	+18° 41'	G12	II a0	13	14°F	17:49	116 19:45	A
31684	HD 7927 φ Cass	01:18.1	1968 58° 04'	G40	II a0	18	13.5°F	20 11 30	114 20 [illegible]	A
31685	+57° 257		"	"	"	"		20:24	4½ 20:28 30	C
31686	+57° 249		"	"	"	"		20:45	46 21:31	A
31687	HD 14542	2:20.7	1969 57° 15.1	G40	"	"	13°F	21:43	21:[illegible]	C
~~31688~~	~~φ Pers~~	~~1:32.4~~	~~50° 1'~~	~~G12~~	~~II a0~~	~~9~~				

31657 T1 calibration for plate # 31683

31687 T2 " " " 31684 - 31687

Dome Temp. 14°F

Focus ....

Dome Temp. ....

Transparency Conditions good i some cirrus
21:30 - clouds from w.s.w.

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	GAIN / POINTS	Quality
19:45		W 4:05	20° 06'	~4"	?	none	5-5-5	G-12 filter	800 / 303	[illegible]
		E 0:04			5.7	F0Ia b	4	" GH* filters set 26.0	100/ 10	STRONG
		W 0:12	+58° 04'	5"	7.4	B6 eIa	4	" GH	100/ 5	(GUIDING) STRONG
		W 1:17	58° 10'		10.2	09.5IV	2 - 2	" GH FIELD OF 74" [illegible] EYEPIECE DRAWN	800/41	POOR GUIDING
		W 0:32	57° 15'		7.2	B8	2 - 2	std. SOME [illegible] ABOUT THE [illegible] *	100/5	(GUIDING) STRONG
					~~3.95~~	~~30pe~~		~~Spect. Bin~~	40/17	

CLOUDS
& light snow

mwp-2/65°F// [illegible]

G-12 PH 'A' loaded.

Date Dec 13-14/68 **Observer** LGH **Julian Day**

Plate No.	Object	R.A. ~~1900~~ 60	Declination ~~1900~~ 60	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.F.	Hour Angle End
31688	BD +57° 258	1 18.1	58 . 2	640		18	43°F	18 20	19 26	A	0 27E
31689	+57° 247	"	"	640		"	40°F	19 49	20 46	B	0 37W

Dome Temp. 23°F
Focus 37, 36
Dome Temp.

Transparency Conditions Fair strong wind clouds from 20.30 on

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
19 [illegible]	0 27E		0	10.7	—	8-8-8	400/25	VERY WEAK
2[illegible]	0 37W	58 10		10.1	09.5 IV	8-8.	Changed form. 400/14	FINE
	Closed up				21:45		because of clouds	

Date Dec 14/15 Sat-Sun **Observer** /Bü-Sv **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
31690	HD 26965	$04^h 10^m.7$	$-07°49'$	G12	I 0-D	9 long	10°F	01:31 (45)	02:16	A	[illegible]
~~31691~~	~~HD 90[illegible]~~	~~$10^h 24^m.7$~~	~~$+29°05'$~~	~~"~~	~~"~~	13 2/3 length	—	~~03:24~~	05:14	C	[illegible]
[illegible]											

Dome Temp. 14°F

Focus

Dome Temp. 7°F

Transparency Conditions Scattered cloud; high wind

Ending Time E.S.T.	P	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
[illegible]	1	*3:00 W		>6"	4.4	K0 V	5-10	Seeing extremely poor. (Probably weak. Forced to stop – telescope close to platform) 40/25	* SL. WEAK
~~[illegible]~~		~~0.11 W~~	~~+28°46'~~	~~>6"~~	~~8.36~~	~~K2 V~~	~~7-8~~	Seeing terrible. Should have had ca. 350 counts. Forgot to remove dark slide. 400/14	
								Tried to focus telescope using Foucault, but seeing so bad that not much improvement obtained.	
								* SLIT TOO LONG; Fe COMP 2/3 MISSING	
								Note: We found loaded plate holder in [illegible]. It is included in box of exposed plates just in case there is something on it. It is placed on that side of plate container which is at tail end of arrow.	
								T.V. [illegible] very poor. Dec. picture goes double when various switches (e.g. dec. [illegible]) are activated. RA picture could also do with some improvement.	

Date Sun Mon Dec 15/16 1968 **Observer** Ri, Cs, ~~PM~~ Mas / Bü-Ci **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.F.	Hour Angle End
31691	BD +57° 260	1968 1ʰ 18.4	+58°04	G40	IIaO	18	12°F	18 07	(3) 18 10	[illegible]	
31692	257							18 27	(5) 18 32	[illegible]	E1ʰ25
31693	249							18 47	(85) 20:12	B	0ʰ15W
31694	HD 26162	4ʰ ~~2~~ 3.3	+19° ~~2~~ 21'	"	"	"	10°F	20:28	(7) 20:35	[illegible]	34E
31695	HD 9138	01 24.9	+05 38	G12	IIaO	9		20:50	(73) 22:03	A	[illegible]
31696	HD 22484	03 31.8	+00° 05	"	"	"		22:15	(20) 22:35	[illegible]	0ʰ1W
31697	HD 26162	04 03.3	+19° 21'	"	"	"		22:43	(81) 00:04	A	[illegible]
31698	HD 35610	05 19.4	-00° 59'	"	IIaO	"		00:27	(64) 01:37	C	[illegible]
31699	HD 66109	07 57.1	+02° 36'	"	"	"		01:40	(38) 02:18	A	[illegible]
31700	HD 81797	09 22.7	-08° 14'	"	"	"	10°F	02:29	(6) 02:35	[illegible]	[illegible]
31701	HD 89449	10 14.3	+19° 59'	"	"	"		02:52	(27) 03:19	A	[illegible]
~~31702~~	~~HD 92188~~	~~10 36.2~~	~~-01° 13'~~	"	"	"	10°F			C	
31702	HD 107328	12 15.3	+03° 51	"	"	"		04:09	(53) 05:02	C	[illegible]
31703	HD 109379	12 29.1	-22° 51	"	"	"	10°F	05:20	(9) 05:29	A	[illegible]E
31704	HD 126 202	15 14.2	+02° 09	"	"	"		06:00	(38) 06:38	C	[illegible]E
31705	(β Vir) HD 102870	11 45.5	+02° 20'	"	"	"	11°F	06:49	(11) 07:00	A	[illegible]W

Dome Temp. +15°F

Focus 26

Dome Temp. + 15°F

Transparency Conditions very high winds hazy (relatively!)

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	+52°04		5.7	F0Ia	4	Capping mechanism fell apart (universal joint) did a little work on it — [illegible]/10	FINE
E 1h 25m			7.4	B6e	4	wind & star jumping to strong — 200/8	FINE
0h 15W		~3	10.2	B1II	2-2	[illegible] — not [illegible] though — 800/26	FINE
2h 10E	19°32	~4	6.4	K1	2-2	reset focus 25 — 200/13	SL. STRONG
1h 57W	+06°00	4-5"	6.2	K4	5-5-5	Std. vel. — 200/150	FINE
0h 22W	+00°20	~5	5.2	F9	5-5-5	" " moving at sidereal rate! — 200/100	SL. STRONG
1h 20W	+19°35	~4	6.4	K1	5-15	" some clouds ↑ — 200/65	V. SL. WEAK
1h 27W	-00°54	~5	5.9	K0	5-5-5	Finder field drawn Std. vel. — 200/150	FINE
0h 20E	+02°28	~4	5.5	K3	5-5-5	Std vel — 200/150	SL. STRONG
01h 26E	-08°30	~3	2.2	K5	5-5-5	Std. vel. — 20/15	FINE
01h 35E	+19°40	~4	5.3	F5	5-5-5	Std. vel. — 200/100	STRONG
			7.4	K1		Std. vel. Abandoned: too much [illegible] — 400/300	
01h 53E	+03°32'	~4-5	[illegible]	K1	5-5-5	Std. vel. — 200/150	FINE 5-[illegible]
01h 34E	-23°12'	~4-5'	2.8	G4	5-5-5	Std. vel. Tremendous drift in dec. Due to wind? — 40/21	(GO DISH) SL. WEAK
03h 15E	+1° 56'	~5'	5.6	G0	5-5-5	Std. vel. — 200/100	FINE
00h 34W	+1° 56'	"	4.16	F5V	5-5-5	Bright std. vel. — 40/21	FINE

OVER

Date Sun Mon Dec 15/16 contd. **Observer** Ri, Cs, PM / Bü-Ci **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
31705 T1	calibration step wedge for plates				31690, 31695 – 31705					
T2	"	"	"	"	31688, 31689, 31691 – 31694					

Dome Temp. ....

Focus ....

Dome Temp. ....

Transparency Conditions ....

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
								Very slight precipitation of minute ice crystals inside	
								dome, even after dome closed.	
								Hook on slow motion control box	
								needs to be tightened.	
		16 Dec 1964 /	MWP-2 /		68°F				

Date Mon./Tues. - Dec. 16/17 [illegible] **Observer** Hk Cs / Ri Ci **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
31706	φ Per	1h 37.4m	+50°11'	6-12	IIa-O	9	17°F	17h 26m (8)	17:34	A
31707	β Ari	1h 49m	+20°7'	"	"	13 LONG	"	17h 48m (3)	17:50	C
31708	AR Cas	23h 25.4m	+58° 0'	"	"	9 LONG	"	18:05 (6)	18:11	A
31709	HD 222404	23h 35.2m	+77° 04'	"	"	9 LONG	18°F	18:29 (5)	18:34	C
31710	HD 210745	22h 07.4m	+57° 04'	"	"	"	"	18:49 (6)	18:55	A
31711	HD 206778	21h 39.3m	+09° 25'	"	"	"	"	19:06 (3)	19:09	C
31712	HD 17506	2h 43.4m	+55° 29'	"	"	"	"	19:36 (11)	19:47	A
31713	HD 22649	3h 33.5m	+62° 54'	"	"	"	"	20:02 (2) 20:33 (28)	20:03 20:48	C
31714	HD 26162	4h 03.3m	+19° 21'	"	"	9	"	21:39 (34)	22:13	A
31715	[illegible]	[illegible]	[illegible]	"	"	13 [illegible]		22:40 (110)	00:30	C
31716	HD 65934	07h 56.1m	+26° 15'	"	"	13	20°F	00:45 (99)	02:24	A
31717	HD 75935	8h 57.9m	+27° 18'	"	"	"	"	02:31 (149)	05:00	C
31718	HD 102494	11h 42.7m	+27° 53'	"	"	"	"	05:13 (79)	06:32	A
31719	HD 89449	10h 14.3m	+19° 59'	"	"	9	20°F	06:29 (9)	06:38	C
31720	HD 107328	12h 15.3m	+03° 53'	"	"	"	"	06:43 (21)	07:04	A
31720 T1	calibration strip made for plates				31706 - 31713, 31715 - 31717					
T2	"	" "	" "		31714, 31718 - 31720					

Dome Temp. 21°F

Focus ....

Dome Temp. 20°F

Transparency Conditions 16:56 EST clouds: thin overhead. Thicker near horizon, especially in west.
17:20 EST — much worse. Black clouds. Only bright *'s. High velocity wind.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS		Quality
2:41 E	+50°34′	2″	3.95	B0pe	5-5-5	Hk *	40/18	FINE
2:37 E	+20°40′	"	2.7	A5	5-5-5	Hd Eclipsing Binary	40/15	* FINE
0:07 W	+58°24′	"	4.89	B3 V	5-5-5	" " "	40/15	* FINE
0:21 W	+77°30′	"	3.2	K1 III	5-5-5	Bk *	[illegible]/30	* FINE
2:10 W	+58°03′	3″	3.6	K III$_b$	5-5-5	"	40/30	* FINE
2:51 W	+9°46′	"	2.4	K2 Ib	5-5-5	"	40/31	* (guiding) FINE
1:36 E	+55°48′	"	3.8	K3 Ib	5-5-5	"	40/21	* FINE
1:20 E	+63°15′	"	5.1	S5	5-5-5	" (SEE FINDER FIELD)	40/30	* (guiding) FINE (GUIDING)
0:13 E	+19°34′	"	6.4	K1	5-5-5	STD VEL: BROKEN | LARGE SMALL	40/30	FINE BROKEN
0h54 W	+41°17′	"	5.92	B5 V	5-5-5	Hd Ecl. Bin.	400/150	FINE
0h10 E	+26°45′	"	8.87	G8 III	5-5-5	Sec. Std. Vel field drawn	800/400	FINE
1h35 W	+27°04′	~2	9.35	G8 V	5-5-5	"	800/400	FINE
0h04m W	+27°32′	"	8.26	G8 IV	5-5-5	"	800/400	FINE
1h47 W	+19°40′	~3	5.3	F5	5-5-5	Std Vel [* SLIT TOO LONG; IRON ARC PARTLY OBSCURED]	200/100	NO COMP. (guiding fine) **
0h12m W	+03°31′	3	6.1	K1	5-5-5	Std Vel	200/150	NO COMP. FINE **

** ARC GAP WAS TOO NARROW.

mwp-2 / 40°F | 17 [illegible] 1988 | [2AOCIHS]

Date Tues/Wed Dec 17/18 **Observer** Sc, Hns/Hr Sv **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
31721	β Lyrae	18h 46.5m	+33° 15'	G12	IIa O	13	25°F	17h 39m EST	17h [illegible]m	A
31722	β Lyrae	18h 46.5	+33° 15'	G12	"	13	25°F	17h 45m	17h 49m	C
31723	β Lyrae	18h 46.5	+33° 15'	G12	"	"	25°F	17h 54m	17h 59m	A
31724	P Cygni HD193237	20h 14.1m	+37° 43'	G12	"	"	24°F	18h 09m	18h 18m	C
31725	P Cygni	20h 14.1	+37° 43'	G12	"	"	24°F	18h 22m	18h 31m	A
31726	φ Per	1h 37.4	+50° 11	G12	"	9	24°	18h 51m	18h 54m	C
31727	φ Per.	1h 37.4	+50° 11	G12	"	9	24°	18h 59m	19h 03m	F
31728	φ Per.	1h 37.4	+30° 11	G12	"	9	24°	19h 09m	19h 12m	C
31729	Mira	2h 14.3	-3° 26'	"	"	13	22°	19h 40m	20h 42m	D
31730	Mira	2h 14.3	-3° 26'	G12	"	"	21°	20h 46m	21h 48m	C
31731	Pleione 28 Tau	3h 43.3	+23° 51'	G12	"	9	20°	22h 58m	23h 12m	C
31732	Pleione "	3h 43.3	+23° 51'	G12	"		20°	23h 14	23h 25m	A
31733	Pleione	3h 43.3	+23° 51'	G12	"	"	20°	23h 30m	23h 43m	C
31734	BF Aur.	4h 58.0m	41° 09'	G12	"	SHORT 13	20°	1h 30m	04 30	C
31735	HD90961	10h 24.3	23° 05'	G12	"	NORM. 13		04:47	05:40	A
31736	HD102494	11h 42.7	23° 35'	G12	"	"		05:48	06 52	C
31736T.	Calibration for	31728, 31734-6								

Dome Temp. ....

Focus ....

Dome Temp. ....

Transparency Conditions .... Clear-bright [illegible]

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
4h 21m W	+33° 22'	4"	4	B9p	none	position 1 calcite 40/20	
4h 28m W	+33° 22'	4"	4	B9p	none	2 40/20	
4h 38 W	+33° 22'	4"	4	B9p	none	1 40/20	
3h 30m W	+37° 58'	4"	4.9	B1eq	none	1 calcite 40/20	
3h 43m W	+37° 58'	4"	4.9	B1eq	none	2 40/20	
1h 18m E	+50° 32'	4"	4.0	B0ne	none	1 40/18	
1h 00m E	+50° 32'	4"	4.0	B0ne	none	2 40/18	
1h 09m E	+50° 32'	4"	4.0	B0ne	7-7	[illegible] 7 sec. 40/[illegible]	FINE
0h 01m E	-03° 04'	4"	var	M6e	none	1 40/60	
1h 01m W	-03° 04'	4"	var	M6e	none	2 40/60	
[illegible] W	+24° 06'	6	5.1	B8ne	none	clouds - 1 position 40/20	
2h 08m W	+24° [illegible]'	6	5.1	B8ne	none	2	
[illegible] W	+24° 06	6"	5.1	B8ne	none	1 [illegible]	
[illegible] 58 W	41 16	3	8.5	B5V	5-5-5	Hα Em, B[illegible] 400/[illegible]	FINE
[illegible] 43 W	28 36	3	9.26	K2 III	5-5-5	See Star Vel. 400/300	FINE
[illegible] W	27 37	3	9.24	G8 IV	5-5-5	" " " 400/216	FINE

MWP/2 [illegible] 60° [illegible] 16 [illegible]/6 F

31726 - 2 = # 31721 - 31727; 31729 - 31733

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Date 18-19 Dec/68 Wed-Thurs **Observer** McE Bj HK(φ...)/Ea. Sv **Julian Day** ....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
31737	δ Pers	1:37.4	+50° 11'	G12	IIaO	9	26°F	17:18	[4] 17:22	C
31738	δ Pers	1:37.4	50° 11'	G12	IIaO	9	"	17:24	[2] 17:26	A
31739	HD 200465	20:52.5	+39 06	G12	IaO	9xL		17:52	[53] 18:59	
31741	HD 210745	22:07.4	+57° 42'	"	"	"		20:59	[7] 21:06	A
31740	HD 200465	20:58.5	39° 06'	G12	IIaO	9xL		19:00	[106] 20:46	C
31742	HD 3651	0:34.2	20° 43'	G12	IaO	9xL		21:21	[44] 22:05	C
31743	HD 17506	2:43.4	55° 29'	G12	IIaO	9xL		22:12	[11] 22:23	A
31744	HD 22649	3:33.5	62° 54'	G12	IIaO	9xL		22:31	[32] 23:01	C
31745	HD 26965	4:10.7	-7° 49'	G12	IIaO	9xL	27°F	23:09	[22] 23:31	A
31746	HD 44033	6:14.4	+14° 42'	G12	IIaO	9xL		23:37	[48] 24:25	C
31747	HD 46537	6:17:2	+49° 20'	G12	IIaO	9xL		00:35	[21] 00:56	A
31748	HD 45829	6:24.6	+07° 59'	"	"	"		01:14	[331] 04:45	C

31748 T1 calibration step wedge for # 31737 - 31748

MWP-2/68° - 11 20 Dec/68

Dome Temp. 31 °F

Transparency Conditions EXCELLENT

Focus

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	EXP. 80x#3	REMARKS		Quality
3:47 E	+50° 34'	2"	3.95	B0pe	5-5-5	Hα *		45/22	(GUIDING) FINE
3:43 E	"	"	3.95	B0pe	5-5-5	S. Bin	SMALL END PIECE [illegible]	40/[illegible]	(GUIDING) BROKEN! FINE
W 3:30	+39° 26'	2 1/3"	6.4	K2I	5-5-5	BK		200/200	V. SL. WEAK
4:30 W	+58° 09'	3"	3.6	K1Ib	5-5-5	Bk	(PLATES 39-42 ADD 1 i.e. 39-42 → 40-43)	100/100	FINE
W 6:18	39° 22'	5"+	6.4	K2I	5-5-5	Bk		200/200	V. SL. WEAK
W 3:00	21° 07'	2-3"	5.8	K0V	5-5-5	Bk		400/400	FINE
W 1:08	55° 49'	2-3"	3.8	K3Ib	5-5-5	Bk		100/100	FINE
W 0:50	63° 16'	2-3"	5.1	35—	5-5-5	Bk		400/400	FINE
W 0:50	-7° 30'	8"	4.4	K0V	5-5-5	Bk		100/100	FINE
E 0:20	+14° 42'	4"	5.0	K3Ib	5-5-5	Bk		100/100	V. SL. WEAK
E 0:10	+49° 19'		5.1	K5Iab	5-5-5	Bk		100/101	(GUIDING) SL. WEAK
W 3:55	+07° 58'		6.8	K0Iab	5-5-5	Bk	CLOUDS: STOPPED AT 4[45]	100/~~64~~	WEAK

P.H. "A" LOADED ON NORTH PIER

CLOSED UP 450

CLOUDS 3[20] 4[30]

2 291 Note from Dec 11-19: P.H. A - loaded, unexposed.

Date 23/24 Dec 1968 **Observer** - /nds **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
31749	HD 70206 V Cnc	16.0 08h 16m 10s	+17 56 +17° 36.1'	G12	IIa0	13	23°	0405	0450 0635

Dome Temp. 20°

Dome Temp. 18

Dome Temp. 20°F

Focus ...

Dome Temp. 18°F

Transparency Conditions Cloudy 1st half. Clear after 3, but very high wind.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
$4^h 10^m$ W	+17°26′	4″→8″	9.0	Me	5+10+15	very strong wind - seeing deteriorated during exp. hopefully, enough counts to get emiss. lines. 4500/50 exp. terminated by low clouds & high wind - couldn't keep star in slit w/ dome vent - hopeless	E m only.

Date Jan 29/30 1968 **Observer** Ri Hns Lp / Hc-Gz **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
31750	φ Per	1h 37m.4	+50° 11'	G12	2AO	9	17	18:16	18:22	A
31751	HD 22484	3h 31m.8	0° 05'	"	"	"		20:00	20:13	A
31752	BD +57° 258	1h 13m.6	57° 47'	G40	2AO	18	17°	20:38	21:45	A
31753	BD +57° 249	1h 12m.3	51° 51'	G40	2AO	12	17	21:53	22:36	B
31754	BD +57° 247	1h 12m.1	57° 50'	"	"	"	16°	22:45	23:24	C
31755	HD 14542	2h 15m.9	56° 56'	"	"	"	16	23:47	23:52	A
31756	HD 45829	06 24.6	+07 59'	G12	2AO	009		00 21	02 37	C

31756 T1 calibration step wedge for plates 31749 - 31756

Dome Temp. 20
Focus 27.5
Dome Temp.

Transparency Conditions cloudy
clearing after 20:10

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS		Quality
0h 56m E	50° 32'	4"	3.95	Scope	5-5-5	HK* clarity	40/1.8	(SL. FOG) FINE
1h 05 E	00° 20'	4	5.2	F'3	5-5-5	Std Vel	200/100	FINE
2h 45m W	+58° 10'	4"	10.T	—	G12 G40 2-8-8	G12 GH*	800/80	
3h 43m W	+58° 13'	4"	10.2	BIV	G40 8-8-8	G40 GH* clouds	800/40	
4h 34m W	+58° 13	4"	10.1	09.5 IV	8-8-8	G40 GH*	800/40	
3h 51m W	+37° 13'	4"	7.2	B8	8-8-8	G40 GH Std Vel	200/10	
02 29 W	+07 58	4-5	6.8	KOlab	5-5-5	G12 BK PROG 0225 CLOUDS	400/300	SL. WEAK

30 Dec/64 // MWP-2/64°,=

WHERE IS BAICAR?

Date WED 1/2 1969 THUR **Observer** G2 / Wy - Mc **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.F
31757	φ PER	1 37.4	+50 11	G12	2A0	009	10°F	19 18	[5] 19 23	A
31758	β ARI 11636	1 49.0	+20 19	"	"	09 L	"	19 53	[3] 19 56	A
31759	HD 14969	02 19.7	+29 26	"	"	013	8°F	21 02	[113] 22 55	A
31760	HD 32963	05 01.8	+26 12	"	"	"	"	23 14	[76] 0: 30	A
31761	BF AUR	4:58.0	41° 09'	"	"	13 2/3 L		0:46	[4 11] 4:57	C
31762	HD90861	10:24.3	+29° 05'	"	"	13 2/3 L	2° F	4:15	[16] 4:31	+

31762 - 1 calibration step wedge for plates 31757 - 62

Dome Temp. +10 °F

Focus

Dome Temp. 0

Transparency Conditions Good (WINDY)
scattered clouds after 1h

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS		Quality
00 10W	+50 34	4-5"	3.95	B0pe	5-5-5	HK *	40/18	SL. STRONG (GUIDING)
00 32W	+20 40	"	2.7	A5	5-5-5	Ecl. Bin	40/15	FINE
03 00W	+29 47	"	8.96	K3 III	5-5-5	S.S.U.	400/200	SL. WEAK
W1:53	+26° 20'	"	8.36	G2 V	5-5-5	S.S.U. * THIS STAR IS VERY CLOSE TO THE MOON (SKY VISIBLE ON SLIT)	400/135	SL. WEAK
W5:24	41° 17'	"	8-9	B5 V	5-5	Ecl. Bin (4 PIECES) FIELD OK (*)	800/273	BROKEN SL. WK.
W0:34	28° 45'		8.36	K2 III	5-5	S.S.U. CLOUDS	800/40	VERY WK.

mwp-21 at °E ll ? from 169

* THIS PLATE WILL BE FOGGED AT 1 END
SOMETHING SHOULD BE DONE TO REPAIR
THE DARK SLIDES (BOTH OF THEM)

Date Fri Jan 3/69 1969 **Observer** L - Irv **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I
31763	AR Cas. H.D. 221253	23 25.4	58° 0	G 12	2Ao	009		18 53	19 05	C

Dome Temp. +16°F

Transparency Conditions

Focus

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2h 13m E	58° 23'	0	4.89	B3 V	15	Hd Ecl Bin Light Clouds 40/15 sky clouding over	* SL. WK.
						* FE. COMP. PARTLY CUT OFF	

Date Jan 4, 1969 **Observer** [illegible] Mar W3 / [illegible] **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.F
31764	φ Pers.	1 37.4	50° 11'	G12	~~[illegible]~~ IIa-O	9	14°	18:13	(3) 18:16	
31765	HD 21699	3:25.0	47°41'	G12	IIa-O	9	14°	18:46	(12) 18h 58	
~~31766~~	~~BF Aur~~	~~4h 58m.0~~	~~41°09'~~	~~G12~~	~~IIa-O~~		~~14°~~		?	
31766	Pleione	3h 43m.3	23°51'	G12	IIa-O	9	14°	19:40	75 19h 31	
31767	R Cnc	08h 11m.0	+12°02'	G12	IIa O	9 [illegible]	10°	0315	04 30	

Dome Temp. 15° F

Focus ....

Dome Temp. +10°F

Transparency Conditions Clear → cloudy, → clear → cloudy.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
$0^h\ 45^m$ E	+50° 34′	3″	3.95	B0pe	15	Sp. Bin. 2½ minutes	N. COMP. V. WEAK
$1^h\ 52^m$ E			5.36		15	40/[illegible]	FINE
			~~VAR 8.5–9.5~~	~~B5V~~		TOO CLOUDY !	
? $0^h\ 50^m$ E	29°.4′		5.1	B8pe	15	through thick clouds 40/12	SL. WEAK BROKEN
$2^h\ 55^m$ W	+11° 52′	3″	8:	Me	5+5+5.	terminated by clouds 400/114	VERY WK.
						#67 broken after exposure.	

Date Jan 5-6 **Observer** AG - LP **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
31768	φ Per	1h 37m.4	+50° 11′	G12	IIa-O	9 long	14	2200	22:35 (35)	C
31768 T	calibration strip wedge for plates 31763 – 31768									
31768 F1	G+O focus test			G+O (10 focus)	II a-O	9	16°F			A
F2				"	"		"			A
F3				"	"		"			A

Thurs Jan 9-10 Opened & cleared some snow (roughly) from telescope. Then cloudy. Partly clear at 7 am. LA

3/10 Cloud 2nd half. 3.30 am HT

Dome Temp. 15

Focus

Dome Temp.

Transparency Conditions Loury, Thick Overcast

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
3h 40m W	+50° 34'	2"	3.35	B0pe	15	through mucho clouds. 40/17	SL. STRONG
6 Jan /69 // MWP-2 / 6f °F							
					2/2	ni fillts + GCa12 focus 20.0	C TO R
						27.4 *	U SL. C TO UI 2N UI.
						Dome = 19 °F 33.0	C TO UI.
						* from graph	

Date Jan 10/11 Fri-Sat **Observer** Bü-Ir./Sc **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
31769	φ Per	$1^h 37^m.4$	+50°11'	G-12	II a-0	9	13°F	22:05	22:13 (8)	A
31770	HD 44537	$06^h 17^m.2$	+49°20	G 12	II a 0	long 9.?		22:35	85 0 hours approx.	C

Sun. Mon. Jan 12-13 A few clear breaks after 0300 HV

31770 T1	calibration step wedge			G12	13 Jan } for plate 31769, 70					
31770 F1	focus test			G12	II a 0	9	16°F			c

Dome Temp. 10°F

Focus

Dome Temp.

Transparency Conditions reasonably clear at ca. 19:45 clouded over at 20:10. closed up until 22:00 hrs.

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS		Quality
2:13	A	3h 36m W	+52° 35'	3"-4"	3.95	B0pe	5-5-5	Hk *	40/18	FINE - SL. STRONG
[illegible] appr.	C	Approx. 0:43 W	+49° 19'	3"-4"	5.1	K5 Iab	5-5-0	Bk * Clouds & Snow	20/170	SL. WEAK
								↑ no comparison (2 hours after end of exp. - pulled plate out) J.C.S.		
		MWP/2 - 61°F - 11-13 Jan 69.								FINE (O. SL. C TO WT. IN RED)
	C						10/10	no filter		

Date Jan. 13/14, 1959 - Mon./Tues. **Observer** HK / **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
31771	φ Per	1h 37.9m	+50° 11′	6-12	IIa-O	9	+24°F	18:37	(4) 18:41	A
31772	"	"	"	"	"	"	"	19:09	(6) 19:15	C
31773	BD +57° 365	1h 15.1m	+57° 50′	6-40	"	18 mm	"	19:46	(59) 20:45	E

31773 T₁ calibration step wedge for plates 31771-3

Dome Temp. +26 °F

Focus ....

Dome Temp. +25 °F

Transparency Conditions occasional low clouds
2130 – clouded in

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
					← NO FILTER		STR. COMP.
0:15 W	+50°34'	2-3"	3.95	80pc	5-5-5	At ☆ 94/18	FINE
0:49 W	"	3-4"	"	"	5-5-5	" 94/18	FINE
2:42 W	+58°13'	3"	10.2		8-16	GH ☆. FD3/12	WEAK

mWR-2/ 68°E // 14 Jan '69

DEC CLAMP BECAME INOPERATIVE.
MR FIXED IT AND SUGGESTED
THAT IT BE CLEANED OFF

G-12 P.H. A LOADED IN NORTH PIER

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R. H.

Date Jan 14/15, 1969 Tue/wed **Observer** Go Sr Sc **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
607-Hα								2010	0640	

Dome Temp.
Focus
Dome Temp.

Hour Angle End

Dome Temp. 25°F

Focus

Dome Temp. 17

Transparency Conditions

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
						First 2h to R2, Dd, 6th fc flexure program!	
						Pwr supply disconnected. Reconnected	
						after locating fault (??)	

Date JAN 15/16 **Observer** MSE, LP, (B) / En (Go, Ci; ~20 m 2d) **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
31774	HD22649	$3^h 33^m.5$	$+62° 54'$	G/2	IIaO	9x6		17:53	19:03 (70)	C
608-1 to 19	M67, Hyades							1945	0230 (6:45)	
31774+1	step wedge for 31774 17 Jan/69 low wp-2/ℓf° c									

Dome Temp.
Focus
Dome Temp.

Hour Angle End
E1,17

Dome Temp. 18°F

Focus

Dome Temp. 15°F

Transparency Conditions

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
E 1:17	63° 12'	3-4"	5.1	55	5-5-5 T	Bk. NO EXP. MTR. (H.V. ON)	STRONG
						2^30 CLOUDS 3^15 STILL CLOUDY CLOSED UP	

Date Jan 19/20, 1969 (Sun–Mon) **Observer** Ir–Lp / Hr Ci **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
31775	φ Per	1h 37m.4	+50° 11′	G-12	II a O	9 long	33°	[illegible]:50	(3 1/3) 18:33.5	A	5m W
31776	HD 21699	3h 25m 04s	+47° 41′	G-12	II a O	9 long	31°	20:00	(1) 20:10	A	20m W
31777	Pleione	3h 43m.3	23° 51′	G-12	II a O	9 extra long	31°	20:33	(12) 20:45	C	33m W
31778	27 Tauri	3h 43m	23° 46′	G-12	II a O	9 extra long	31°	21:06	(3) 21:09	C	1h 02m W
31779	27 Tauri	3h 43m	23° 46′	G-12	II a O	9 [extra long]	31°	21:14	(2 1/2) 21:16.5	A	1h 10m W
31780	Pleione	3h 43m.3	23° 51′	G-12	II a O	9 long	31°	21:33.5	(3 1/2) 21:37	A	1h 30m W
31781	27 Tauri	3h 43m	23° 40′	G-12	II a O	9 long	31°	21:44	(2) 21:[illegible]	—	1h 38m W
31782	HD 36918	5h 29.9	−6° 04′	G-12	II a O	9 long	30°	22:23	(162) 01:05	A	[illegible] W
31783	HD 92588	10h 36.3	−01° 13′	"	"	"		01:23	(86) 02:49	C	0h 10m E
31784	HD 103095	11h 47.2	+38° 26′	"	"	"	26°	03:09	(73) 04:22	A	[illegible] W
31785	HD 107328	12h 15.3	+03° 53′	"	"	"	26°	04:31	(34) 05:05	C	[illegible] W
31786	HD 123782	14h 04.6	+49° 56′	"	"	"	25°	05:18	(21) 05:39		0h 34m E
31786 T1	calibration	step wedge for plates	31775 – 31786								

0015 H.V. for EX. MTR. 1P21 FOUND SWITCHED OFF ON TELESCOPE. HV

Dome Temp. 35°F

Focus

Dome Temp.

Transparency Conditions

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
52m W	58 36'	2½"	3.95	B0pe	5-5.5	HK * Power supply for exp. meter switched from spectrophotometer to exp. meter. (had to estimate time of exposure) exposure meter balances but does not count even for ϑ PERSEI !!	(GUIDING) SL. WEAK
20m W	47° 54	2-3"	5.46	B8	5-5-5	r G * 10 min exp	FINE
40m W	24° 04'	2"	4.6	B8	5-5-5	r G * 12 min exp	(GUIDING) FINE
1h 02m W	24° 00'	1.5"	3.5	B8	5-5-5	r G * 3 " "	(GUIDING) V. SL. WEAK
1h 10m W	24° 00'	1.5"	3.5	B8	5-5-5	r G * 2.5 " " repeated last slit length	WEAK
1h 30m W	24° 04'	1"-1.5"	4.6	B5	3-5-5	r G * 3.5 min exp	WEAK
1h 38m W	24° 00'	1.5	3.5	B8	15	r G * 12 min exp	(GUIDING) SL. WEAK
03h 12W	-5° 57.5	1.5→3"	8.25	B8	7-4-4	r G * ~~180~~ 162 " "	SL. WEAK
0010E	-1° 34'	3"-4"	7.4	K1	5-5-5	STD. VEL 200/152	FINE
0011 W	+37° 56'	3"	7.3	K1	5-5-5	" " 200/153	FINE
0027 W	+03° 28'	3"-4"	6.1	K1	5-5-5	" " 40/30	FINE
0047E	+49° 36'	"	6.8	M2	5-10	" " 0530 CLOUDS 200/23	VERY WEAK

PROGRAMS NEEDED FOR 2nd HALF.

mwp-2/ 68° E11 20 Jan 1969 (2AOC1H8)

Date Jan 20/21 **Observer** /R.H.s **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I	Hour Angle End
31787	HD 66141	07h 57m	+2° 36′	G-12	IaO	9.	28°	00h 19m 38	00h 57m	A	[illegible] W
31788	HD 81797	09h 22.7	−8° 14′	G12	"	"	28°	01h 07m 4	01 11m	C	0h 30 E
31789	HD 89449	10 14.3	+19 59	"	"	"		1h 22m 2	01 44m	P	[illegible]
31790	HD 91948	10 31.9	+60° 38	"	"	"		1h 57m	02h 21m	C	0h 30 W

31790 T1 calibration step wedge for plates 31787 - 31789
31790 T2 calibration step wedge for # 31790

JAN. 23-24 3 30 AM. CLOUDY, FOGGY H.R.

Dome Temp. 30°

Focus

Dome Temp.

Transparency Conditions some clouds, fog, hazy

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS		Quality
0h 40m W	+12 25°	~4	5.5	K3	5-5-5	G12 Std. Vel	200/150	FINE
0h 30 E	−8°29′	~4	2.2	K5	5-5-5	" "	20/15	FINE
0h 51 E	+19° 40		5.3	F5	5-5-5	"	200/100	FINE
0h 30 W	+60° 19	~3	7.37	F8	5-5-5	Spectroscopic Binary	400/194	V. SL. WEAK
						clouds at 03:15		
						closed up at 3:30		
21 Jan 1969 / mwp-2 / 68°F						(2440148)		
22 Jan 1969 / mwp-2 / 68°F						(2440149)		

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Date Jan ~~25/26~~ 26-27 Sun/Mon Observer Bü-Hns-Cs/ Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
31791	φ Per	01ʰ 37.ᵐ4	+50° 11′	G12	I a-O	9 reg.	15°F	18:16	(6) 18:22	A	0ʰ 6ᵐ W
31792	27 Tau.	3ʰ 43.ᵐ2	+23° 55′	G12	I a-O	9	13°	18:39	(7) 18:46	C	0ʰ 54ᵐ E
31793	28 Tau.	3 43.ᵐ2	+23° 50′	"	"	"	"	18:56	(19) 19:15	A	0ʰ 7ᵐ E
31794	HD 21699	3ʰ 25.ᵐ1	+47° 41′	"	"	"	"	19:35	(18) 19:53	C	30ᵐ W
~~31795~~	~~ι Ori B~~	~~05ʰ 30.ᵐ5~~	~~−5° 59′~~	~~"~~	~~"~~	~~"~~				A	

31794+1 calibration step wedge for plates 31791 - 31794 // mw P-2/68°F /27 Jan/69.
(2 ↑ 0 < 1 H 8)

Dome Temp. 16°F
Focus ....
Dome Temp. ....

Transparency Conditions Clear sky — Broken Cloud + Haze 19.05

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS		Quality
0h 46m W	50° 34′	~2.5	3.95	B0,1a	5-5-5	HR *	40/18	FINE
0h 54m E	23° 59′	4″	3.62	B8III	5-5-5	r G* Comp	40/15	FINE
0h 27m E	26° 03′	4″	5.01	B8p	5-5-5	r G* pec clouds reflect moonlight nearby	200/80	FINE
30m W	47° 57′		5.36	B8III	5-5-5	r G*	200/80	* FINE
			~7.3	B9		r G*	400/150	

Clouds

Close 23:15

* SLIGHT FOG AT BLUE END OF PLATE

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Date Jan 27/28 1959 Mon/Tues. **Observer** HK Ir Cke/ **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
31795	φ Pers	$01^h37^m.4$	+50°11′	G12	IIaO	9	10°F	18:03 (3)	18:06	C	0^h31^m W
31796	HD 16452	$2^h33^m.3$	+81°01′	"	"	"	10°F	18:47 (78)	20:05	A	1^h2^m W
31797	BD +57°263	$1^h14^m.0$	+57°46′	G40	"	18	"	20:44 (26)	21:10	B	4^h0^m W
31797 T1	calibration step wedge for plates 31795-7						28 Jan	69/mwp-2 (2 a.o.c. 148)			

Dome Temp. 10 °F

Transparency Conditions EXCELLENT

Focus

Dome Temp.

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
8:05	C	0ʰ 37ᵐ W	50° 34′	3-4″	3.95	80 p	5-5-5	Hk * 40/17	FINE
20:05	A	1ʰ 32ᵐ W	81° 21′	2-3-4″	5.9	G8	5-5-5	Bk * STOPPED BY TELESCOPE COMING CLOSE TO PIER 400/176	* L. WEAK
20:10	B	4:10 W	58° 13′	4″	10.2		12-24	GH * exposure stopped by clouds 800/~~25~~ 11	VERY WEAK

Clouds two

6-12 plate holders loaded

in dark room

* FE COMP. PARTLY OBSCURED (TOO LONG ? SLIT)

Cke did most of loading, setting [illegible].

Date 2/3 FEB 1969 SUN/MON **Observer** H G Cke / ~~[illegible]~~ N.A. Jim THOMSON **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
31798	φ Pers	1h 37.4m	+50°11′	G12	IIa0	9″ long	31	1831	(7) 1838	A	W
31799	"	"	"	"	"	"	"	1855	(13) 1908	"	W
~~31800~~	~~"~~	~~"~~	~~"~~	~~"~~	~~"~~	~~"~~	~~"~~	~~1920~~	(13) ~~1933~~	"	~~W~~
31801	HD 21699	3h 25.1m	+47°41′	"	"	"	"	1952	(82) 2115	C	2 W
31802	Pleione	3h 43.2m	+23°50′	"	"	"	"	2130	(60) 2230	A	W

31802 T. calibration step wedge for plates 31798 – 31802

1 15 W

78 E 57 W

Dome Temp.
Focus
Dome Temp.

Dome Temp. 31 °F

Focus

Dome Temp.

Transparency Conditions poor - much high cloudiness → complete clouds

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS		Quality
1h 3[illegible]m W	+ 58° 34′	2″	3.95	B0pe	15s	(take 3 to make sure, since this is important [illegible])	40/17	* FINE GUIDING
2h 01m W	"	3′	"	"	"	variable seeing - wind [illegible]	40/18.	* FINE BROKEN
~~2 2[illegible] W~~	~~"~~	~~3~~				~~[illegible]~~ DISCARDED	40/16	
2h 22m W	+47° 5[illegible]′	3-4	5.3	B[illegible]p	5 at [illegible]	clouds getting worse ~2 mag. [illegible]	200/80	** FINE
3h 20m W	+24° 04′	[illegible]	4.5	B[illegible]pe	5+5	clouds quite bad = terminated by complete cloud. Beware G2V	400/1[illegible]	* WEAK

3 Feb 1969 // mwp - 2/c 8° F // (2 AO C1HF)

* Fe COMPARISON ALMOST VISIBLE [POSSIBLY G40 FILTER STILL IN PLACE?]

** Fe NOT VISIBLE

Date 3/4 Feb. 1969 Mon./Tues. **Observer** Hk, Cs, / Ri, Hns **Julian Day**
N.A.: Jim Thomson

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
31803	φ Per	$1^h 37^m.4$	$+50° 11'$	G12	IIa O	9	26°F	$18^h 40$	$18^h 47$	C	$1^h 30^m$ [illegible]
31804	"	"	"	"	"	"	"	$18^h 58$	$19^h 04$	A	[illegible]
31805	α Ori	$5^h 49.8$	$+07° 23'$	G12	IIa O	9 long	26°F	$23^h 55$	$0^h 13^m$	A	$3^h 00$ W
~~31806~~	~~ζ Cnc~~	~~8^h [illegible]~~	~~[illegible]~~	~~G12~~	~~IIa O~~						
31806	HD 76294	[illegible]	$+06° 20'$	G12	IIa O	9	17°	$00^h 5$[illegible]^m	$01^h 17^m$	C	[illegible]
~~31807~~	~~[illegible]~~	~~08^h [illegible]~~	~~$+34° 26'$~~								
3180[illegible]	calibration strips	wedge	for	31803 – 31806							

Dome Temp. 24°F **Transparency Conditions** Clear Very high wind!

Focus

Dome Temp. 23°F

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
[illegible]	C	1h 30m W	+50°34'	~4	3.95	B0pe	5/5/5	HR * 40/17	FINE (GUIDING)
[illegible]		2h 00m W	"	"	"	'	5/5/5	HR * BROKEN: 1 LARGE 1 SMALL 40/18.6	FINE
								Change to G-40	
								Clouded in completely 20:25 EST.	
								Snow flurries (or blowing).	
								A G-40 plate-holder (A) is loaded and in N-pier.	
							left at	G-40: G40 filter GG18 " slit at 18	
								23:02 : Dome T = 22°F	
								Change back to G17	FINE
[illegible]		3h 00 W	+7°31	~3	0.4	M2I	5/5/5	Fuse blew in middle. (Bk *) 20/15 ~~40/25~~	Broken in Box
[illegible]		1h 03W	+06°07'	6	3.1	K0III	5/5/5	(Bk *) clouds & hazy 40/20	FINE
								P.H. A+C loaded in N.P.	
								closed up at 02:30	

Date.. **Observer**.. **Julian Day**..

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.

Ending Time E.S.T.

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